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Alaska Highway Pipeline Inquiry

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Kenneth M. Lysyk, Chairman
Edith E. Bohmer
Willard L. Phelps

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Alaska Highway Pipeline Inquiry

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Available by mail from

Printing and Publishing
Supply and Services Canada
Ottawa, Canada K1A 0S9

or through your bookseller.

Catalogue No. CP32-31/1977
ISBN 0-660-01227-8

Canada: \$4.50
Other countries: \$5.40

Price subject to change without notice.

Design: Paul Rowan, Alphatext Limited

Cover Photo: Andrew Hume

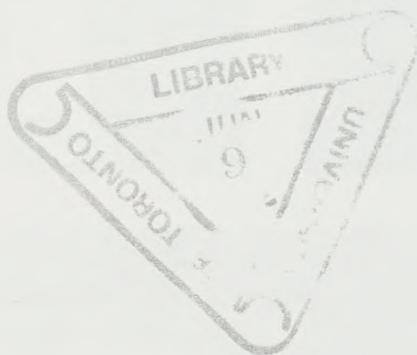


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Alaska Highway Pipeline Inquiry

Whitehorse, Yukon

July 29, 1977

*The Honourable Warren Allmand
Minister of Indian Affairs and Northern Development
House of Commons
Ottawa, Ontario*

Dear Mr. Allmand:

You have directed this Inquiry to report in a preliminary way on the social and economic impacts that may be expected if a gas pipeline is constructed, as proposed, through the southern Yukon. You have also asked us to report on the attitudes of Yukoners to this proposal.

The first task requires an understanding of existing social and economic conditions and their present trends in the Yukon. As for the second task, Yukoners' attitudes toward the proposed pipeline can be understood only in the context of how they see themselves and the society in which they live. This report summarizes a great deal of evidence presented to the Inquiry on these two broad subjects, and we hope that you and your colleagues will find it useful in reaching a decision on the proposal. However, before turning to the report itself, we should like to make some general observations on its nature and scope.

The Yukon and its People

In describing the Yukon and its people, we think it is unwise to rely with any confidence on generalizations about the north and about northerners. Certainly in many ways the Yukon may be usefully compared with its neighbours, Alaska and the Northwest Territories, but one must be careful to recognize the differences as well as the similarities among the three regions. For example, in geography the Yukon more closely resembles Alaska than the Northwest Territories and, like Alaska, the Native people are a minority within the total population of the Yukon. In the Northwest Territories, on the other hand, the Native people form a clear majority.

There are also important differences between the Yukon and its neighbours in their political institutions, traditions, and social attitudes. A comparison of the Klondike gold rush with the gold rushes in Alaska at about the same period show a marked contrast in the ability of the administrative authorities to maintain order and control. Important differences exist also between the political institutions of the Yukon and the

Kenneth M. Lysyk, Q.C., Chairman
Edith E. Bohmer
Willard L. Phelps

Northwest Territories. In the Yukon, a wholly elected territorial council first met in 1908; in the Northwest Territories, the territorial council was not wholly elected until 1975.

For a long time, the chief means of access from the south into the three jurisdictions was by water, and the most important settlements were located along the main rivers. In both Alaska and the Northwest Territories, many communities still are not reached by road, but in the Yukon the situation is quite different. Following construction of the Alaska Highway in 1942-43, the network of roads has been extended to every community in the Yukon, except Old Crow, an isolated Indian village in the northern part of the territory. There the people maintain a traditional life centred on hunting, fishing, and trapping. In this respect, Old Crow more closely resembles many communities in the Mackenzie District of the Northwest Territories than it does other settlements in the Yukon. Settlements in the Yukon (except Old Crow), and those reached by road in the Northwest Territories, have much in common with many settlements in the northern sections of the western provinces. The social and economic effects of all-weather overland access to northern Canada can hardly be overestimated.

Although strong parallels may be drawn between the social and economic consequences of the temporary presence of a large number of construction workers on projects such as the Alaska Highway and the proposed pipeline, there can be no doubt that the continuing influence of a highway on the region through which it passes is of much greater magnitude than that of a pipeline. The most obvious difference may be seen in the changed pattern of settlement. The experience in the Yukon has been that the highways have the effect of a magnet. New communities have sprung up along the highways, whereas those that were passed by have been abandoned. Four of the eight communities along the Yukon stretch of the Alaska Highway did not exist before its construction. Conversely, Fort Selkirk, once a major centre on the Yukon River near its confluence with the Pelly River, was quickly abandoned when the Klondike Highway passed it by. A pipeline has no comparable power to create or destroy communities.

Another generalization that has been proposed seems to us still more fallacious, and that is to divide

Yukoners into two groups, Indian and non-Indian, and to attribute to each group totally different values and aspirations. Having created two mutually exclusive categories, which are defined by race, it may be tempting to assign intransigent points of view to each of them. From this position, it is a short step to the conclusion that a conflict of interest between the two groups is inevitable.

The supposition that Indian and White Yukoners hold entirely different values and seek radically different objectives has, no doubt, a certain simplicity that may be intellectually attractive, but it reduces any discussion of Yukoners to a consideration of stereotypes, and any discussion of their problems tends to lead to the assignment of blame rather than to the more complicated and far more important business of working out a solution that may be acceptable to everyone.

We do not suggest that there are no differences between Indians and Whites in the Yukon, and we realize fully that relations between the two groups must be improved. On this subject, we join with the Yukon Native Brotherhood in deplored the present situation. In 1973, in an important statement entitled *Together Today for Our Children Tomorrow*, they declared,

... the picture of the Yukon Indians is not a pretty one. The Yukon Indian people are not a happy people. Both the White man and the Indian are becoming more and more disgusted with each other. The Communications gap, the Social gap, the Economic gap – all these are widening. Both Indian and White are getting nervous because of the lack of understanding and tolerance among both groups (p. 15).

Most Yukoners would concede that this assessment of the situation is close to the mark and that, since 1973, there has been some further deterioration of relations between the two groups. It is our deeply felt conviction, Mr. Minister, that a reversal of this trend must be a leading priority for your government in all of its policies that relate to the Yukon in any way. We believe that your decision with respect to the proposed pipeline will be of critical importance in whether or not this trend is reversed. The strong and unanimously held view of this Board is that solutions must be sought and found that will promote, not erode further, harmonious relations among all segments of society in the Yukon. This view is basic to the recommendations that we advance in this report.

We fear that a decision that is insensitive to the wishes of all Yukoners, Indian and White alike, would aggravate existing tensions and lead to an even stronger polarization of views and attitudes. It is clear to us that to proceed immediately with the construction

of this pipeline (or with any other project of comparable scale) would run counter to the aspirations of many Yukoners and that it would disappoint them bitterly. It is equally clear to us that many Yukoners regard properly controlled economic development not only as inevitable but also as desirable, and they see in the proposed pipeline an opportunity to improve economic and social conditions in the Yukon. A lengthy or indefinite moratorium on the construction of the pipeline would seem to be, for practical purposes, a decision against building it through the Yukon, because in that case the United States would be likely to proceed with the all-American route proposed by El Paso. Failure to have taken such an opportunity would surely lead to frustration, anger, and recriminations that might be as dangerously divisive among the people of the Yukon as a decision to proceed immediately with construction of the pipeline.

The proper solution to this problem seems to us to lie in flexibility and compromise. Middle ground must be found that will be acceptable to most, if not to all, Yukoners.

We see a danger in preoccupation with issues that divide or that might divide the people of the Yukon. During the hearings, we had much pleasure in finding that there is, among most Yukoners, a consensus on a wide range of subjects, objectives, and values. Because differences have been emphasized so often, it may be worth noting here some of the subjects on which there is, if not unanimity, at least a high level of agreement.

No one could fail to be impressed, first of all, by the widely held conviction that the Yukon is an extraordinarily fine place in which to live. Time and again, we were reminded of the pride that Yukoners take in this special part of the world that is their home. A growing tourist industry is ample demonstration of the fact that the Yukon is a land of impressive contrasts, dramatic beauty, and spiritual refreshment. For those who, through birth or choice, are fortunate enough to live here, there is a wide choice of lifestyles or of a combination of different lifestyles.

Even today, a few Yukoners continue to live entirely off the land, depending little, if at all, on other sources of income for their livelihood. Many others hunt, fish, and trap, not for their primary source of income, but to supplement wages earned from some involvement in the industrial economy, or from public income support payments, or from both. Still others have regular full-time employment, but they turn as often as they can to the wilderness, not only to supplement their income, but for recreation and to reaffirm their sense of oneness with nature. It is this variety of choice that

many Yukoners value above all else in their reasons for wishing to live here.

Access to the wilderness is one of the Yukon's greatest attractions. Everyone here shares a common interest in preserving the Yukon's magnificent physical environment from pollution or destruction. For many Yukoners, a life anywhere else would clearly be only second best.

All Yukoners share an interest in improving and deepening the relations among themselves, and especially between Indians and Whites. No reasonable person can fail to be concerned by problems or events that threaten to divide communities along racial or, indeed, along any other lines.

All Yukoners are eager to ensure that neither they nor their children will ever feel obliged to leave the Yukon for the lack of employment. If the youth of the region are prepared by education and technical training for careers that they cannot follow in the Yukon, their inevitable departure will frustrate the personal preference of those individuals and run counter to the best interests of the economy and the society of the region as a whole.

The common pride of Yukoners in the wilderness at their doors and in their heritage, both Indian and White, leads everyone to a shared interest in preserving the cultures that are distinctive to the region and in enhancing them further. There is some recognition that the curricula in the schools should reflect more fully than they do at present the history and the indigenous cultures of the Yukon.

There is a shared awareness of some sombre aspects of life in the Yukon. Everyone recognizes that there are grave social problems, many of them related to alcohol, in all communities. There is a general desire for a more diversified economy, and especially for the economy to be based more fully on renewable resources, so that dependence on welfare may cease to be the ordinary way of life for so many persons.

Yukoners look forward to a time when the territory need not depend upon grants from the federal government of Canada, and when the people will have a greater measure of control over the region's resources, both renewable and non-renewable. This desire is manifested in the continuing debate over the achievement of provincial status, and in the general desire to see the Yukon Indian land claim settled soon and fairly. The Indian people are naturally eager to secure title to the lands that they consider to be their own and to bring them under their own control before continued economic development in the region

narrows further the range of choices that are available to them. All Yukoners would welcome the establishment of a comprehensive plan for land use as soon as possible.

With respect to the Yukon Indian land claim, we should like to emphasize that, contrary to the expectation of some observers, there is no significant element of public opinion in the Yukon that either challenges the validity of this land claim or doubts that it is important and desirable to settle the claim quickly and justly. Everyone understands that the settlement of the Indian land claim will not merely prepare the way for future economic developments that may be financed from southern Canada, but that the substantial financial resources and the specified rights that will be placed in the hands of the Indian people will, of themselves, provide a strong and long-lasting stimulus to the local economy that cannot fail to be of benefit to everyone living in the Yukon.

Finally, although this point is by no means last in importance, Yukoners are agreed that the best means of addressing both the problems and the opportunities of the Yukon is one that may be described as a one-government policy. The Planning Council, formed of representatives of the Council for Yukon Indians, the Government of Yukon, and the Government of Canada, was established to discuss the settlement of the Yukon Indian land claim. It has agreed that two goals of the settlement should be to "Provide the Yukon Indian people with the incentive and opportunity to have their rightful say, within the context of a one-government structure, in the decision-making authority which governs their everyday life," and to "Develop a one-government structure which reflects and is responsive to interests of all Yukon residents and which is compatible with the evolution of government in the Yukon" (*Document No. 2, March 8, 1977*).

The Planning Council has reaffirmed this policy in a settlement model (*Document No. 4, July 14, 1977*). The Government of Yukon also subscribes to this position and, during the course of our hearings, no one challenged the soundness of this approach. You will agree, Mr. Minister, that this policy represents another important way in which the Yukon differs from the Northwest Territories, where there does not appear to be a similar consensus on government structure.

It would not be difficult to add to this list of values and objectives that all Yukoners share, but perhaps we have said enough here to indicate why we feel that areas of common interest are far more significant than any differences in emphasis or in priorities that may contribute in some way to the existing tensions

between the various segments of the Yukon's population.

Yukoners and the Pipeline

The proposed pipeline is not only large-scale in its own right, but it symbolizes large-scale development generally. Any mention of it is likely to open debate on a range of subjects that concern not only Yukoners but the nation as a whole. The proposed pipeline does, however, raise a number of associated issues about which there are real differences of opinion in the Yukon.

Many of these differences have to do with priorities: two of the most important of them centre on the situation of the Indians people and their still unresolved land claim and on the threat that economic development, unrestrained or merely large-scale, poses for the Yukon wilderness. In respect of these two issues, there is a popular misconception that the debate is between Whites, on the one hand, all of whom would support immediate construction of the pipeline, and the Indians, on the other, all of whom would be unilaterally opposed to the construction of a pipeline at any time or under any circumstances. The reality of the situation is, of course, far more complex.

In fact, there is no simple dichotomy between Indian and non-Indian views: there is, instead, a wide spectrum of opinions, in which three main schools of thought may be distinguished, about the desirability or the undesirability of constructing a pipeline through the southern Yukon.

At one end of the spectrum there are some persons, though not many, who regard economic development generally – and the pipeline in particular – as synonymous with progress. They see the benefits of the pipeline as so obvious, and the negative aspects of it as so trifling, that they believe construction should proceed with the least possible delay.

At the other end of the spectrum there is another group, also a small minority, who with equal sincerity view economic development generally – and the pipeline in particular – as jeopardizing an entire way of life. For some of them, such development represents the worst aspects of the life they have left behind in the south, and it threatens the wilderness that is such an important part of the Yukon's appeal to them. The logical conclusion of this view, although it is not often

expressed, is that no pipeline should be built through the Yukon – ever.

The majority of the witnesses that appeared before the Inquiry represent a third group. Their acceptance or rejection of the pipeline is conditional. In their view, construction ought not be undertaken unless and until certain other goals are achieved and certain preventive and mitigative measures are adopted to lessen the possible dangers of the project.

The two groups at either extremity of the spectrum are predominantly White. Between them, in the middle of the spectrum, are the persons who consider that the pipeline should not be constructed before a settlement and implementation of the Indian land claim have been achieved. This view represents not only the official position of the Council for Yukon Indians, but also the great majority of the Indian people who addressed us, as well as many Whites. Also in the middle part of the spectrum were many other witnesses, both Indian and non-Indian, who were prepared to accept construction of the pipeline if – and only if – certain measures are taken to prevent possible undesirable effects.

It is, therefore, not only an oversimplification, it is in fact wrong, to attribute pro- or anti-pipeline sentiments to individuals or groups on the basis of racial origin.

We have explored the attitudes of Yukoners to the pipeline at some length because it is, we think, important to consider the issues that the proposed pipeline raises in the context of the long-term interests and concerns of the people who will be most closely affected by it.

The Impact of the Pipeline

We now turn, in broad outline, to our preliminary assessment of the socio-economic impact of the proposed pipeline. The fundamental question, of course, is whether or not this impact can be kept within acceptable limits. And we agree with the majority of Yukoners who appeared before us: we think that the social and economic effects can be kept within acceptable limits, provided that certain conditions are met. These conditions involve:

- (i) certain financial and other resources,
- (ii) appropriate preventive and mitigative measures, and

- (iii) sufficient time before construction of the pipeline begins to complete planning and to mobilize resources.

These conditions, if met, will give Yukoners the chance to protect themselves from the pipeline's possible negative impact and, at the same time, they will permit them to take advantage of the opportunities that the project will present.

At this point, it is useful to discuss separately the construction phase and the operation and maintenance phase of the pipeline. In our view, the second phase does not require extended consideration here. After the pipeline is in place, Yukoners will not often be reminded of its existence. By the company's own estimate, some 200 persons will be employed to operate and maintain the pipeline. This modest increase in the population will not make much difference to the social and economic structure of the Yukon as a whole. The construction phase, however, is an altogether different matter. Any large influx of workers into a sparsely populated area can be expected to cause substantial social and economic dislocations of a sort that the Yukon has already experienced in the past.

From the economic point of view, the benefits and burdens of the project are not equally shared by everyone concerned. Most of the benefits accrue to persons or agencies that are connected in one way or another with the construction of the pipeline, or with activities related to its construction. But everyone in the Yukon will experience the inflationary pressures that the project will cause, as well as other consequences of an overstimulated economy. There will be many persons who will not find the inflationary trend offset by any gain in their own incomes.

With respect to social impacts, we have already noted the vulnerability of the Indian communities and the dangers of disturbance to the wilderness. The National Energy Board, in its recent report, *Reasons for Decision Northern Pipelines*, concluded that "On balance, pipeline projects probably have a negative social impact" (p. 1-143). We think this assessment will apply in the Yukon.

The main benefits from the pipeline will be concentrated outside of the Yukon, largely south of the 49th parallel, whereas the most significant costs, in terms of both economic dislocation and social disruption, will be experienced in the Yukon. In our opinion, such would be the case even without the added and important consideration of the unresolved Yukon Indian land claim.

We believe that the anticipated distribution of benefits and burdens is unfair and unacceptable to Yukoners, and it is our strong view that steps should be taken to redress this imbalance. The federal government must promptly take preventive and mitigative action that will effectively limit undesirable impacts. At the same time, adequate financial and other resources must be made available to Yukoners to enable them to capitalize on the economic opportunities that the project will offer, as well as to compensate them for impacts that are not wholly preventable and that will detract or threaten to detract from the quality of their life at present.

Who will make these financial and other resources available to Yukoners for these purposes? As a number of witnesses phrased the question, Who will pay? We have no hesitation in replying with the general proposition that the money should come from the pipeline company – and that, of course, will mean some additional cost to the eventual consumer. From an economic viewpoint, this arrangement simply recognizes that money is the most efficient means of reapportioning to some extent the concentrations of benefits and burdens, described above. More of the benefits should accrue to Yukoners, and a slight increase of the burden would be borne by consumers at the southern end of the pipeline. We shall have more to say below about compensation payable by the pipeline company.

The Yukon Indian Land Claim

The Yukon Indian land claim is an important exception to the general principle that the pipeline company should pay. We hope that enough has been said to establish that the settlement of this land claim is of basic importance to any consideration of the impact that may be consequent on the construction of the proposed pipeline, but resolution of the Indian land claim is not a responsibility of the pipeline company. It is the special obligation of the Government of Canada.

We devote a chapter of this report to the Yukon Indian land claim, so we shall say here only that we see no need to demonstrate the validity of the claim. The Government of Canada has already committed itself to a comprehensive land claim settlement with the Yukon Indians. The Government of Yukon is a participant, with the Government of Canada and the Council for Yukon Indians, in discussions that are now going forward to establish the terms of the settlement. An agreement on a settlement model was made public, and the document was filed with the Inquiry on the last day of

our hearings. We have already noted with satisfaction that no significant body of opinion in the Yukon questions the validity of the Indian land claim nor the desirability of settling the claim justly and expeditiously.

The Land Claim and the Pipeline

With respect to the Yukon Indian land claim, the proposed pipeline represents both an opportunity and a risk. The opportunity lies in capitalizing on the motivation that the pipeline provides to assign a high priority to the achievement of a settlement as soon as reasonably possible. The risk is that construction of the pipeline may begin before the Indian people can mobilize the financial and other resources provided by the settlement to take advantage of the opportunities that its construction may provide. There is also concern that the construction may be incompatible with, or that it will seriously interfere with, certain of the Indian people's objectives. The Council for Yukon Indians has, therefore, demanded not only a settlement, but also the implementation of the settlement, before construction of the pipeline begins. These points merit some elaboration.

Both the Indian and the White population of the Yukon are eager to obtain an expeditious settlement of the claim, a point explicitly made in *Together Today for Our Children Tomorrow*. "We are asking that you agree with us on a quick settlement to avoid a long fight in the courts and in Parliament. Every day that is lost the economic and social distance between our people and yours increases" (p. 77). We believe that time is not necessarily on the side of the Indian people. Whether the gap between White and Indian referred to above widens or narrows will depend on how effectively the time available is used. That use, in turn, will depend on how promptly the resources that are needed to proceed with settlement implementation are made available.

To date, only two other comprehensive land claim settlements have been achieved in North America, and each settlement was negotiated only after the interest of the governments concerned was stimulated by the prospect of a large-scale construction project. After decades of neglect, the Alaska Native Land Claims Settlement Act was signed in 1971, following a relatively brief but intensive series of negotiations. The process was expedited by the United States Government's keen interest in developing the petroleum resources of northern Alaska as quickly as possible. Similarly, the existence of a valid Indian claim

to land in northern Quebec had been explicitly recognized by both federal and provincial legislation in 1912. No attempt had been made toward the resolution of that claim until the James Bay hydroelectric project was begun, which led to the recent James Bay Agreement.

Both the Alaskan and the Quebec settlements have been criticized from various points of view, but there is no doubt that both agreements represent the most generous settlements so far achieved by the Indian peoples of either the United States or Canada. But would either settlement have been achieved without the governments' wishing to proceed with a large-scale economic development?

It is perhaps cynical to suggest that government responds only to the threat of delay in carrying out projects of economic development, but there is no doubt that it is easier for Indian peoples to engage their government's attention at such times. Perhaps a just settlement of the Yukon Indian land claim could be achieved in the fullness of time, even if there were no proposed pipeline to serve as catalyst, or even if the pipeline were built before a settlement had been negotiated. But, in practical terms, we should recognize that the prospect of an expeditious settlement would be diminished by either turn of events.

Implementation of the Land Claim

Let us now turn to the question of risk. At our hearings, Mr. Daniel Johnson, Chairman of the Council for Yukon Indians, explained why the council felt that the pipeline should not be built until the land claim had not only been settled but had also been implemented. Only then would the Indian people have the necessary resources – capital, title to land, and skills – to participate in the construction of the pipeline itself, and to pursue other economic, cultural, and social objectives that might be prejudiced by construction activities. He estimated that both settlement and implementation would take from seven to ten years, and the council therefore demanded the same ten-year moratorium that Mr. Justice T. R. Berger had recommended in his report on the Mackenzie Valley Pipeline Inquiry. However, the council's position is not inflexible. Toward the end of our hearings, Mr. Johnson testified that, whereas seven to ten years represented a comfortable or an optimum period for planning, negotiating, settling, and implementing a land claim agreement, the schedule for these activities might be shortened.

Both Mr. Johnson and Dr. John Naysmith, who represents the federal government in the land claim negotiations, testified that the implementation of some parts of the proposed settlement might well go forward before final agreement on the whole settlement had been achieved. Now that the settlement has begun to take shape and an agreement-in-principle is foreseen sometime in 1978, it becomes important that the process of implementation not be unnecessarily delayed by a lack of financial and other resources. We believe that everything possible should be done to make these resources available now, so that implementation of the settlement may proceed expeditiously.

Advance Payment to the Indians

Quite apart from any decision on the proposed pipeline, we see no reason why the Indian people should not now have the benefit of some return on the capital they can expect to receive in due course from the settlement. We accordingly recommend that the Government of Canada immediately pay into a special trust account, established for the purpose, an advance payment of \$50 million from the monetary compensation that the Indian people will receive for the settlement of their land claim. Interest on that sum should be calculated on a daily basis at the Bank of Canada rate, from August 1, 1977, and it could be drawn upon by the Indian people with no impairment of their capital. The advance from the monetary compensation for the land claim settlement would be held in a special trust account until the date when the Yukon Indian Land Claim Settlement Act comes into force, and it would be regarded as a part of the total compensation to be paid according to the terms of that act.

We wish to make clear that we have no desire to intrude upon the negotiations that are now leading to a settlement of the land claim, for these negotiations are the responsibility of the Planning Council. Nor do we presume to suggest what might be the final terms of the settlement with respect to monetary compensation. If the Government of Canada should wish to guard against the possibility that the monetary compensation will be established at a lower figure than this proposed advance, it would be simple enough to make adequate provision for a refund of the difference. Should that happen, however, we do not think that interest earned on the difference after August 1, 1977, should be refunded. The Indian people should know with some certainty what amount of money they can spend without impairing their capital or incurring debt. On the

other hand, the monetary compensation of the final settlement may exceed the advance of \$50 million by a considerable margin.

What we wish to stress here is that the sum of money we have recommended bears no relation to any estimate by us of what the total amount of monetary compensation to the Indian people should be or is likely to be. Our desire is to make available to the Indian people at least a part of the funds they can claim as of right, in the form of earned interest, to assist them to implement some aspects of the proposed settlement that do not need to wait for the signing of the final agreement.

We recognize that a number of problems need to be considered in the disbursement of the interest, as described above. Which Indian organization(s) should be the recipient(s) of such funds? Should there be precise definition of the purposes on which such funds may be spent? Indeed, if the Indian people wish, should they be able to draw upon capital, even before the final settlement is signed, for certain specified purposes, such as equity participation in the proposed pipeline, in other major development projects in the Yukon, or in the establishment of new industries based on renewable resources of the type described in *Together Today for Our Children Tomorrow*? We do not feel that it is appropriate for us to discuss these matters, and we recommend that they be referred to the Planning Council. Such questions may take some time to resolve, but that does not affect our recommendation that the special trust account be established now, and that interest on it be calculated from August 1, 1977.

It is of critical importance for the Indian people to have time to organize themselves to use their resources effectively before construction of the pipeline commences, and there is no doubt in our minds that the pipeline company's proposal to begin construction in the summer of 1979 does not allow the time that is necessary. We shall explain later why we believe that commencement of construction must be deferred, and we shall describe what we regard as a minimum period of deferral. The Yukon Indian land claim is, perhaps, the most important reason for deferral, but it is not the only reason for it.

Claim Settlement and Land Selection

As an additional protection against prejudice to achievement of a just settlement of the land claim if a pipeline is approved, we set out certain recommendations in Chapter 8 of this report

respecting a continuation of present constraints on land grants in the Yukon and of informal methods of protecting specific parcels of land in anticipation of the land claim settlement.

Compensation Payable by the Pipeline Company

Let us now take up the question of resources in the context of the funding that the pipeline company should provide. We have noted with interest in the National Energy Board's report, *Reasons for Decision Northern Pipelines*, the acceptance in principle of impact compensation, together with the board's recommendation that a sum not to exceed \$200 million should be paid to the federal government for that purpose. We agree with this principle, but we wish to comment on its application.

Arrangements for compensation should, in our opinion, reflect certain realities. We have referred to two distinct phases of the pipeline project – the construction phase and the operation and maintenance phase – and we suggested that the impacts associated with the latter are not markedly different from those of any other development that might result in a modest increase in population. There will be, of course, a legacy of the social dislocations experienced during the construction phase and a continuation of certain costs associated with those dislocations. In addition, there will be increased demands on public services by the increased population. The construction phase, in comparison, presents problems of far greater magnitude. Existing tax formulas are unlikely to obtain from the pipeline company revenues commensurate with the social and economic costs incurred. At that time, the situation may well be described as one of crisis management, and the crisis will be in the Yukon.

We believe that, insofar as possible, direct quantifiable costs, arising out of social and economic impacts from the pipeline, should be offset through revenues obtained from taxes. In Chapter 6 of this report we offer some suggestions concerning an appropriate level of taxation.

But what of the unquantifiable – although nonetheless real – costs that whole communities must bear in terms of social and economic dislocations and of unwelcome changes to their lifestyle? These social and economic costs will also be experienced in the Yukon, not in Ottawa or in Canada as a whole. We think, therefore,

that funding from the pipeline company should not only enable Yukon communities to react to the stresses and strains associated with the construction of the pipeline, but that it should provide cash for purposes that may not be directly related to these effects. Such funding could help to correct social and economic imbalances through projects and initiatives that would serve to enhance the quality of life in the Yukon and its damaged communities.

In keeping with the objective of redistributing benefits and burdens so that more of the benefits are directed toward the area in which most of the burden will be felt, we depart from the National Energy Board's recommendation that the entire sum, to a maximum of \$200 million, that will represent the indirect costs of the project north of the 60th parallel, be paid to the Government of Canada. In our view, the Yukon and its communities should have first claim on this impact compensation and should determine its administration.

In the distribution of compensation, we think that due regard should be given to a second reality. Some Yukon settlements are, in fact, two communities: Indians and Whites are concentrated in groups that are sometimes physically, as well as psychologically, separated. In most of these twin communities there are some parallel physical facilities, such as two community halls. No doubt there are good historical reasons for this situation, but we believe that it would be a mistake today to divide impact funding for such communities into separate allocations for Indians and non-Indians. Such a division would imply that there was not a sufficient commonality of interest in these communities for a particular project to serve the community as a whole. We are strongly of the view that every community must be encouraged to identify and broaden the areas of its residents' common interests, while fostering cultural diversity. Some administrative structure must be devised to enable Indians and non-Indians to work together in using compensation money to serve the whole community.

As to the amount of compensation to be paid by the pipeline company, we understand the National Energy Board's desire to establish a ceiling figure for impact funding. Without one, the cost of the pipeline might escalate so far that it became uneconomic. On the other hand, if the costs to the Yukon and to Canada are very much in excess of the cost that makes a Canadian route competitive, then that fact by itself should support an argument for El Paso's route.

In any event, we are of the view that \$200 million is a modest enough sum to compensate Yukoners for unquantifiable social and economic costs, and for those changes following in the wake of the pipeline that

will assuredly detract from the quality of life in the Yukon. Accordingly, we recommend that that sum be regarded as the minimum figure to be paid by the pipeline company, and that it be paid into a fund to be administered by and for Yukoners.

In Chapter 11 of this report, we suggest that the pipeline company pay \$200 million into a Yukon Heritage Fund. We suggest further in Chapter 6 that this fund be supplemented in the future by payment into it of a portion of the property taxes collected annually from the pipeline company. The fund, supplemented further by the investment income it generates, would be available for purposes related to improving opportunities for Yukoners and various aspects of the quality of life here.

We further propose in Chapter 11 that the Heritage Fund be applied for purposes, and by methods, to be determined by persons appointed to administer the fund by the Commissioner of the Yukon, acting on the advice of the members of the legislative assembly. On the assumption that some of the monies from the Heritage Fund will be directed to communities, we suggest that those administering the Heritage Fund address the problem of devising an administrative structure to receive these funds at the community level and to ensure that Indians and Whites work together in the application of such funds for the good of the community as a whole.

Finally, we assume that the pipeline company will be required to make fair compensation to individuals who suffer economic loss because of the pipeline construction, and in Chapter 6 of this report we offer some suggestions for dealing with this type of compensation.

In Chapter 10 of this report, which deals with planning and regulation, we propose the establishment of a single agency to be given planning and regulatory responsibilities respecting engineering, social, economic, and environmental aspects of the proposed pipeline. We consider that it is important to establish such an agency at the earliest possible moment so that it may proceed to hire staff, to collect base-line data, and to develop regulatory measures well before the construction of the pipeline begins. Only in this way can the agency perform its duties effectively.

We believe that this regulatory agency should have the power to make decisions here in the Yukon, without having to refer to Ottawa, except where there is an obvious need for some measure of consistency in dealing with the provinces through which the pipeline will pass, and with Alaska. We believe that the top levels of administration and of policy making should include Yukoners among them as the best means of ensuring sensitivity to local issues and conditions. The involvement of Yukoners at these levels will help in making decisions promptly and will avoid costly delays. In Chapter 10 we advance specific recommendations concerning the structure and authority of this agency.

You have stated, Mr. Minister, that if your government approves in principle the construction of a pipeline through the southern Yukon, you would propose to establish another inquiry that would develop a final socio-economic description of the situation and would assist all of the parties concerned to devise suitable terms and conditions for the construction of the pipeline. That undertaking is reflected in our terms of reference where we are directed to make recommendations upon the nature and form of such further inquiry. We recommend that the proposed planning and regulatory agency be instructed to carry out this work, and to conduct such further public hearings as may be appropriate in that connection.

A Planning and Regulatory Agency

We consider it essential that a mechanism be established as soon as possible to plan, control, and monitor all aspects of pipeline activity with a view to minimizing undesirable social, economic, and environmental impacts. In this task, we can profit from the experience of Alaska. There appears to be general agreement that the regulatory measures relating to environmental aspects of the recently completed trans-Alaska pipeline were thorough and have been effective, but that, with respect to the social and economic aspects of that pipeline, there was too little regulation, and it came too late.

Our terms of reference also directed us to provide advice concerning further studies that might be necessary, and you will find that we have made a number of observations and recommendations throughout the report on that subject. In general, however, it is our recommendation that overall responsibility for identification of research and studies needed be assigned to the planning and regulatory agency, together with the responsibility for coordination and funding of such work. We suggest some guiding principles for this in Chapter 10. One qualification of the assignment of general responsibility to this agency has to do with the monitoring of the impacts of the pipeline project. In Chapter 7, which deals with social impacts, we propose that this function be assigned to a separate body.

Deferral of Commencement of Construction

Finally, the third condition we should place on the government's approval of the proposed pipeline is related to deferral of the commencement of construction and to the critically important question of time.

Considerable progress has been made toward working out a settlement of the Yukon Indian land claim. A settlement model has now been approved by the Council for Yukon Indians and by the Governments of Canada and of Yukon. When the model was released, Mr. Johnson and Dr. Naysmith said that they hoped the Planning Council could reach a draft agreement-in-principle before the end of 1977. Both agree that the draft agreement-in-principle could be ratified and signed sometime in 1978. The Planning Council would then proceed to develop a final agreement.

When the Indian people expressed concern about prejudice to a just settlement, if a pipeline is built too soon, they spoke not merely of reaching a final agreement with respect to their land claim, but also of the implementation of the settlement. The issue is complex, because the process of implementation can be expected to extend over many years. On the one hand, it is agreed on all sides that implementation need not await final agreement on the settlement, but could proceed as soon as the draft agreement-in-principle is ratified and signed sometime next year. On the other hand, full implementation of all aspects of the final agreement might take more than a decade. Indeed, as Mr. Johnson pointed out, implementation of some aspects of the final agreement would, by definition, be a continuing process that would have no clear-cut terminal date.

The main question here is not how much time will be required to implement all aspects of the settlement, but how much time will be required to implement certain key elements of the settlement and thereby to avoid prejudice to the overall goal of achieving a land claim settlement that is just as well as expeditious.

Earlier in this letter, we noted that the position of the Council for Yukon Indians is not inflexible and that, in Mr. Johnson's recent testimony to the Inquiry, he said that, although seven to ten years represented an optimum or comfortable amount of time for implementation, a shorter period might be sufficient. On the same day, Dr. Naysmith testified that, in his opinion, most of the elements of the settlement that

would be important in the context of any major economic development, such as the pipeline, could be implemented early in the negotiating process. Should your government accept our recommendation to make an immediate advance payment toward settlement of the Indian land claim, the implementation of certain key elements of the agreement could proceed without having to wait for the payments that will be made when the final agreement is signed.

We have given most anxious consideration to the question of time, Mr. Minister, for we have no doubt that the achievement of a just settlement and the implementation of the Indian land claim is much more important to the future of the Yukon than any pipeline. Moreover, we recognize that it is important for everyone concerned with the settlement to know with as much certainty as possible the pipeline's proposed schedule. With that in mind, we have decided to form our recommendation to you, not in terms of the optimum time that should be allowed, but in terms of what we regard as the *minimum* time that should be permitted to avoid prejudice in its implementation. Our recommendation is based on what we believe can be achieved if all of the participants involved in the settlement of the land claim apply themselves to the task with good will and a sense of urgency.

On the information available to us, which is elaborated upon in Chapter 8 of this report, we consider that a minimum of four years will be necessary to permit sufficient implementation and to avoid prejudice to a just settlement of the Yukon Indian land claim. If your government decides to give approval-in-principle to the construction of a pipeline through the southern Yukon, it is our strong and unanimous recommendation that construction of it should not proceed before August 1, 1981.

If your government indicates that it is prepared to give approval-in-principle to a route through the southern Yukon, subject to deferral of the commencement of construction for the period we have recommended, we assume that this approval will carry with it sufficient certainty so that the Government of the United States can decide whether or not to choose the Canadian route or to proceed with El Paso's all-American route.

Other Possible Pipeline Routes

The schedule we recommend should provide time enough to consider the selection of the route through the southern Yukon that is most compatible with the

long-term interests of the Yukon. The pipeline company's application is for a route that follows the Alaska Highway through the southern Yukon, and the terms of reference of this Inquiry were directed to that application and to that route. The National Energy Board, in its report, *Reasons for Decision Northern Pipelines*, has, however, indicated its approval, not for that route, but for a different one, which it calls the Dawson diversion. This route follows the Klondike Highway, instead of the Alaska Highway, south and east from the Alaska-Yukon boundary to Whitehorse. During our hearings, we learned that there is a significant measure of support for yet a third route, which would follow the Tintina Trench. These three possible routes are described more fully in Chapter 4 of this report, and they are depicted in Figure 3.

The National Energy Board's choice of routes appears to have been made on the assumption that federal approval will be given at an early date to construction of another pipeline, which is commonly referred to as the Dempster lateral. It would follow the Dempster Highway, and its purpose would be to feed Canadian gas obtained from the Mackenzie Delta and Beaufort Sea into the pipeline system for delivery to Canadian markets. Some of the issues raised by this proposal are outlined in Chapter 9 of this report.

Although route selection does not lie within our terms of reference, we were, however, directed to report to you on the attitudes of Yukoners to the proposed pipeline. You may, therefore, wish to know that a number of witnesses who addressed this Inquiry supported a route that generally followed the Tintina Trench, but none supported the Dawson diversion. From the witnesses who referred to the Dempster lateral, we heard strong, nearly unanimous, opposition to its construction unless, and until, further studies could provide adequate assurance that a pipeline could be built along this route without unacceptable costs to the people of Old Crow, to the Porcupine caribou herd, and to the delicate balance of nature in that unique area of wilderness. Many witnesses were convinced that there should be no pipeline along the Dempster Highway in the foreseeable future.

If it seems desirable to preserve the option of connecting a pipeline through the Yukon with gas reserves in the Northwest Territories, the Tintina Trench route would serve that purpose as well as the Dawson diversion. There are, of course, other considerations: the National Energy Board in its report observed, "The diversion would bring a major new source of energy at reasonable prices to the mining activities in the vicinity of the Klondike Highway" (p. 1-168). However, as discussed in Chapter 4 of this report, and as Figure 7 illustrates, a pipeline that

generally follows the Tintina Trench would appear to be superior for this purpose, having regard both to the relative proximity of present and projected mining activities and to the concentration of known ore bodies along the Yukon-Northwest Territories border.

It appears to us, Mr. Minister, that the history so far of inquiries into the impacts of northern pipelines demonstrates the hazards inherent in examining only the route that happens to be the subject of an application by a pipeline company. It cannot be satisfactory simply to substitute another route that may not have been adequately studied, either by itself or in comparison with other possible routes that might better serve the public interest.

We take the view that some of the time made available by deferral of the commencement of pipeline construction could be put to good use by initiating a study of the other possible routes through the southern Yukon. The planning and control agency that we have recommended in Chapter 10 of this report could carry out this task and submit recommendations to you within a reasonably short period of time. If a final choice of route through the southern Yukon is made sometime in 1978, there should be ample time to make decisions that will be consequent on the choice of route and, in the meantime, other important planning for the project could go forward.

Deferral of the commencement of pipeline construction until August 1981, four years away, would, in our view, provide time enough for the planning and control agency that we have recommended to become fully operational. The agency would assemble essential base-line data and institute measures early enough to deal with the undesirable impacts that may be expected before construction begins. Some of these impacts would, no doubt, be felt as soon as approval-in-principle of a southern Yukon route is announced.

Deferral for a reasonable length of time would also give the private sector the opportunity to schedule some activities both before and after the period of pipeline construction to avoid, so far as possible, the consequences of the strong competition that will exist for human and other resources during construction.

The timing of the project will directly affect the extent to which the establishment of programs may be effective in training Yukoners for employment during the construction phase of the pipeline, and thereby reduce the necessity for reliance on in-migrants.

Finally, there can be no doubt that some additional time would benefit the pipeline company itself, both in

terms of increased efficiency during construction, and in savings that may be effected through more careful planning.

In closing, Mr. Minister, we should point out that our report contains various other recommendations that we hope may be of value to you and your colleagues and to those who will be involved in the planning and regulatory process, should your government decide to approve in principle the construction of a pipeline through the southern Yukon. But we wish to make clear that we regard the recommendations contained in this letter of transmittal as of fundamental importance.

It is our strong and unanimous conclusion that the Government of Canada should not give approval in principle to the proposed pipeline through the southern Yukon without accepting our recommendations, as expressed here, for an advance payment toward the settlement of the Yukon Indian land claim, for compensation from the pipeline company, for the establishment of a planning and control agency, and

for a deferral of the commencement of construction of the pipeline.

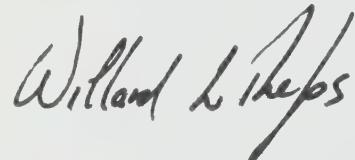
Yours truly,



Kenneth M. Lysyk, Q.C., Chairman



Edith E. Bohmer



Willard L. Phelps

Kluane National Park (Hume)

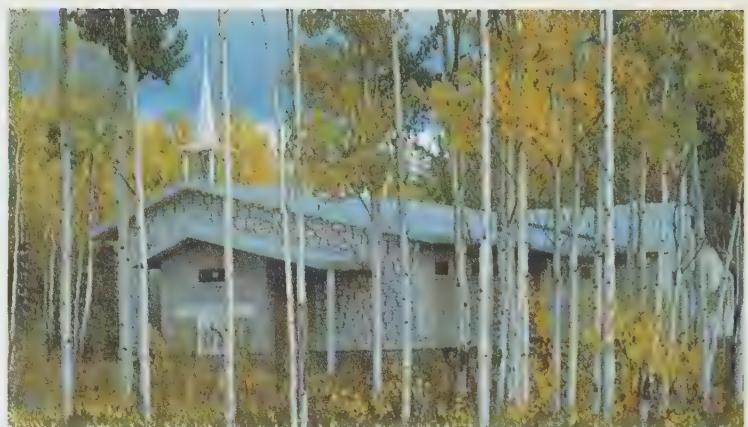


Customs building at Beaver Creek (Yukon government)

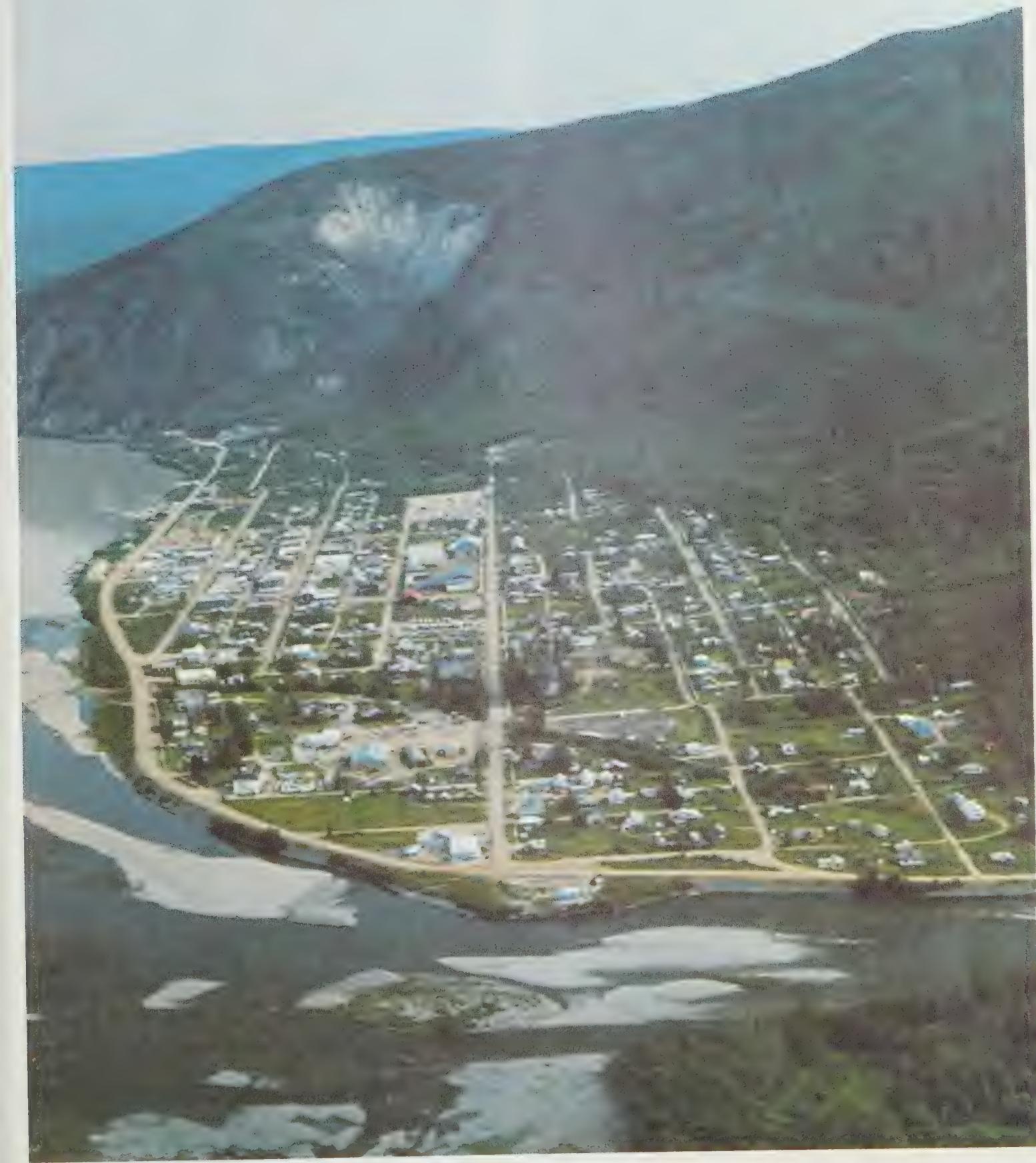
Wooden bridge near Tagish (Yukon government)

Mile 1025 on the Alaska Highway (Yukon government)

Church in Carmacks (Yukon government)



Aerial view of Dawson City (Allison)

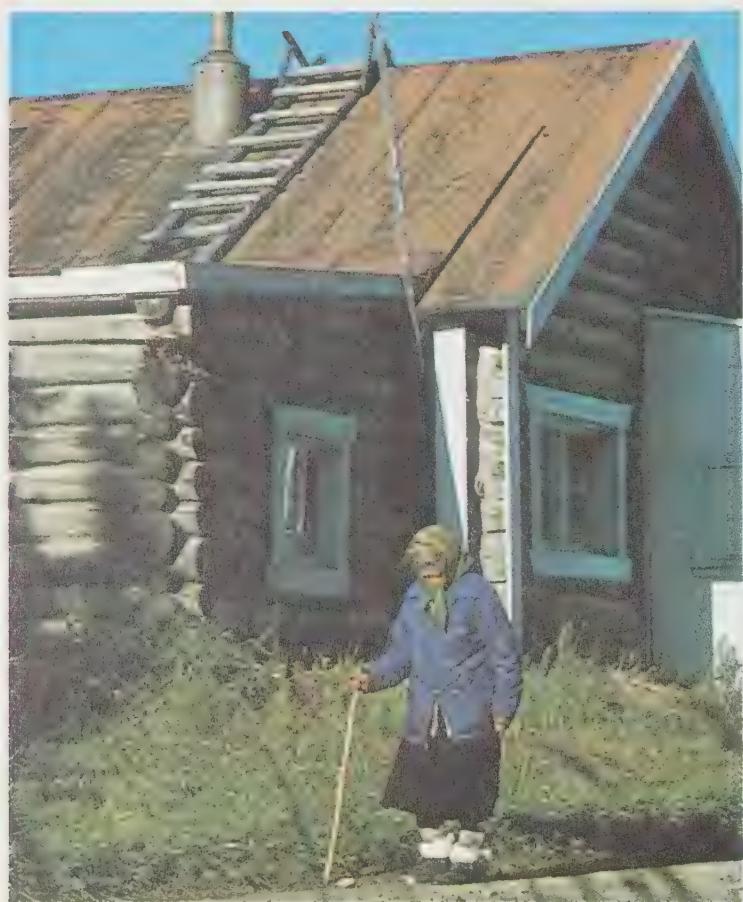


Old Crow (Yukon government)

Yukon legislative assembly in session (Yukon government)

Townssite of Faro (Yukon government)

Whitehorse hydro dam on the Yukon River (Yukon government)

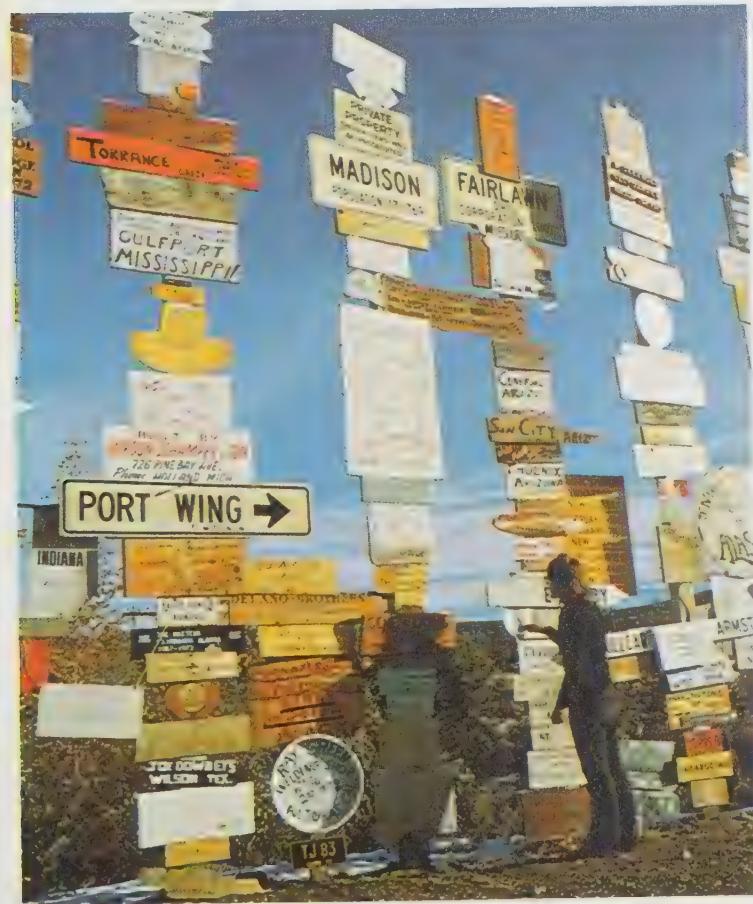
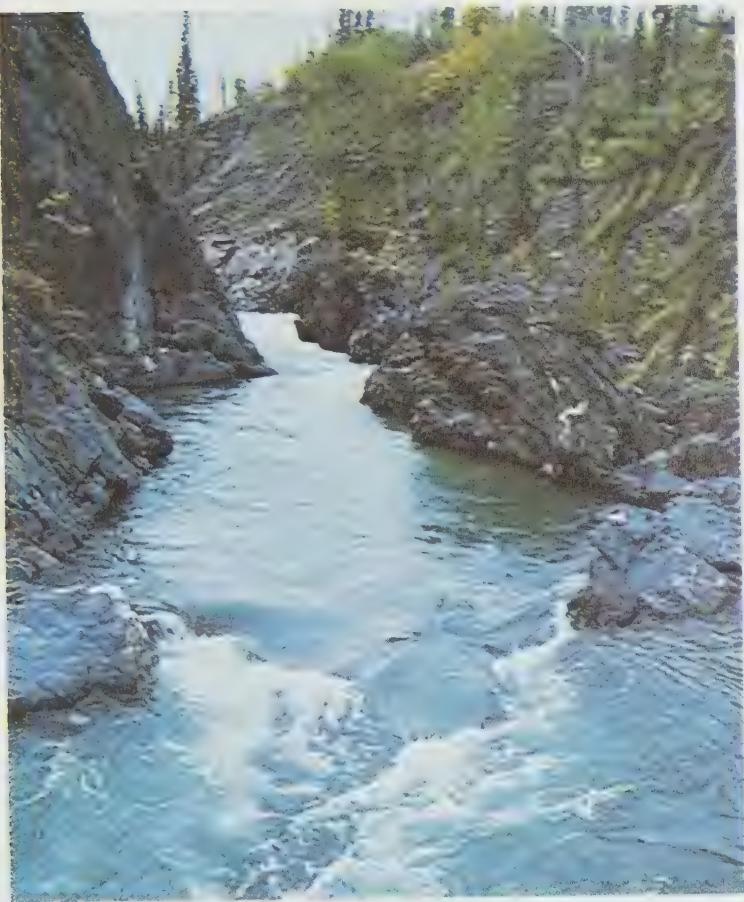


Along the Canol Road near Ross River (Allison)

Sign posts at the Yukon community of Watson Lake
(Yukon government)

Yukon Vocational and Technical Training Centre, Whitehorse
(Yukon government)

Sightseeing boat in Miles Canyon on the Yukon River near
Whitehorse (Yukon government)



Cleaning a moose hide (Yukon government)

Settlement of Fort Selkirk, now abandoned (Bohmer)

View along the Dempster Highway (Allison)

Silver City, once thriving, now a ghost town (Allison)



Dog team on Teslin Lake (Yukon government)

Herd of caribou in the northern Yukon (Yukon government)

Fireweed (Hume)

Dall sheep (Yukon government)

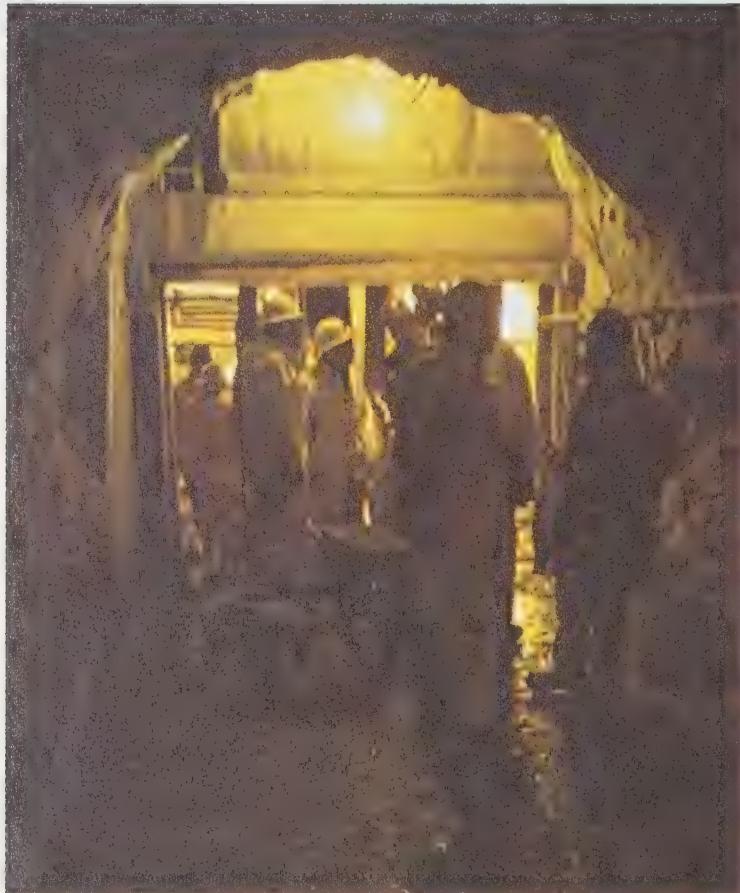


Construction of Aishihik power plant (Yukon government)

Spring break-up on the Pelly River (Yukon government)

Construction of the Skagway Highway, 1976 (Yukon government)

Big game outfitter (Yukon government)

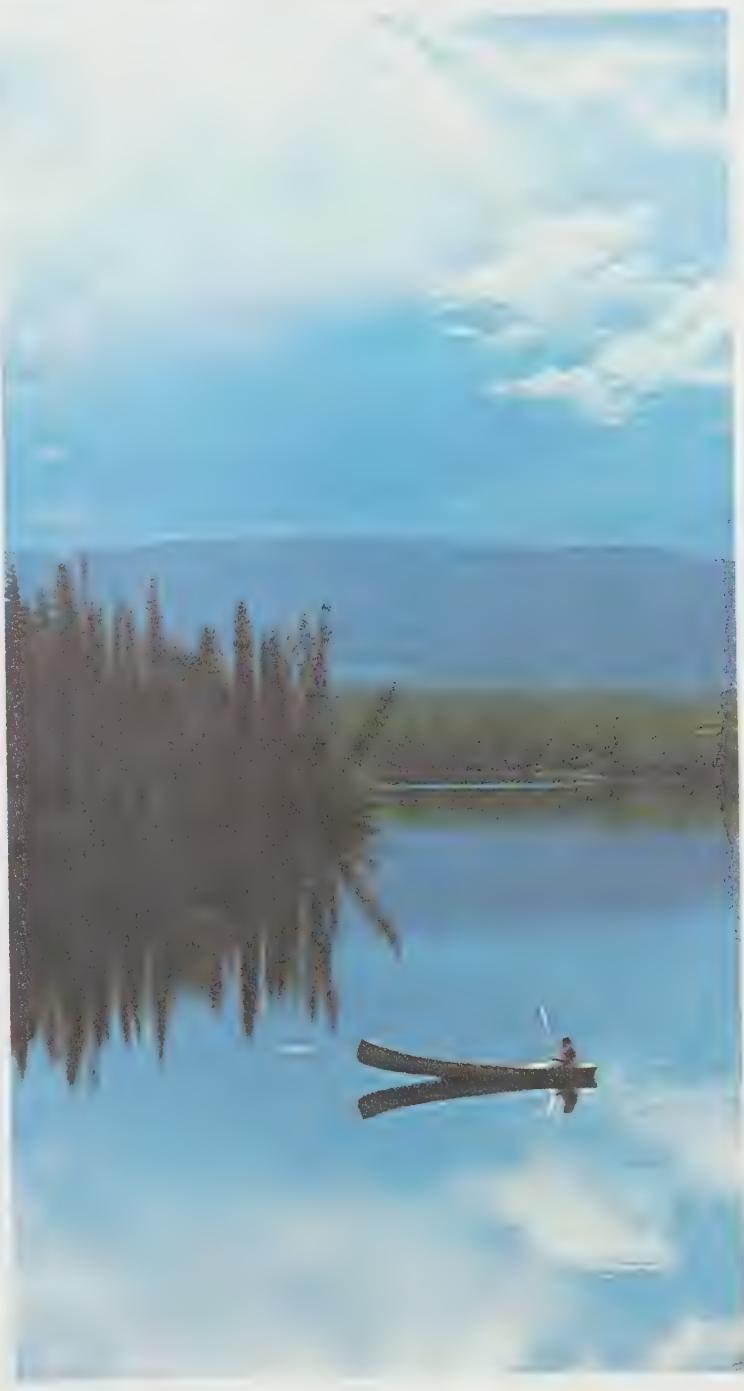
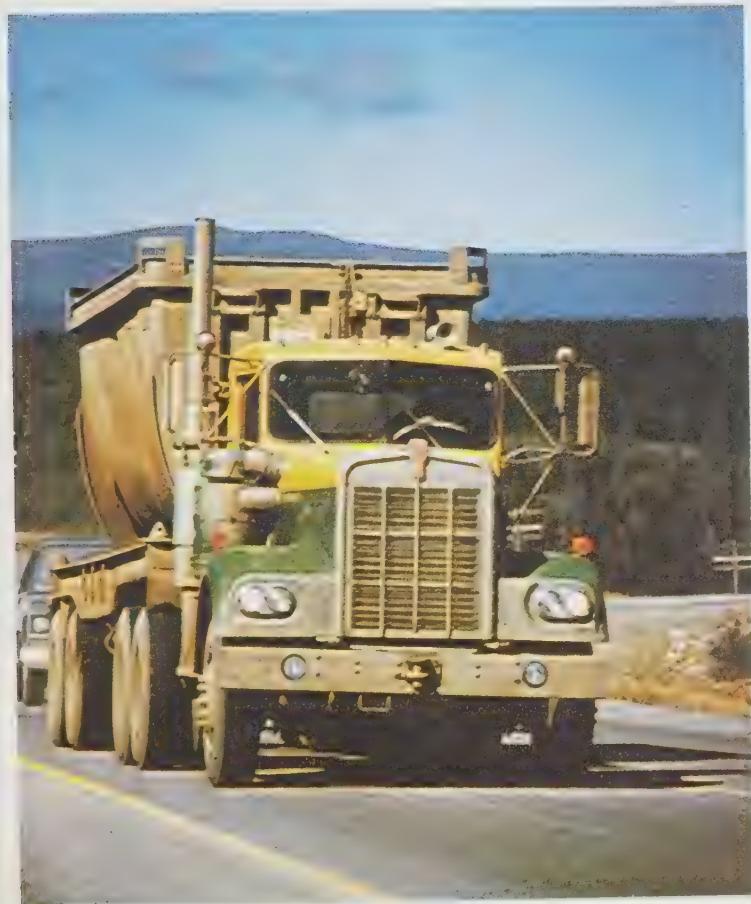


Sawmill operation, Watson Lake (Yukon government)

White Pass ore truck (Retallack—White Pass)

Main Street, Whitehorse (Hume)

Fishing for trout (Yukon government)



Margaret Dick at Ross River hearings (Unger)

Formal hearings in Whitehorse on opening day (DIAND Whitehorse)

Young witnesses testifying at Burwash Landing (Unger)

Eleanor Millard, member of the legislative assembly, testifying at Dawson City (Adamson)



Tin Cup Lake (Hume)



1 The Inquiry



Board members, left to right, Willard Phelps, Chairman Ken Lysyk and Edith Bohmer conduct outdoor hearings at Burwash Landing (Hume)

Cyprus Anvil Mining Corp. Ltd. President John Bruk addresses the Alaska Highway Pipeline Inquiry (Whitehorse Star)

Foothills lawyers question the Yukon government executive committee at formal hearings in Whitehorse (Whitehorse Star)

Hearings at the band hall in Haines Junction (Cooper)

Council for Yukon Indians General Assembly member Shirley Lindstrom at pipeline hearings in Mayo (Cooper)



Geography makes the Yukon a land bridge between Alaska and the rest of the North American continent and, from the beginning of the 1970s, it was recognized that a gas pipeline carrying Alaskan gas might be run through this part of Canada to the lower United States. Until recently, however, attention focussed primarily on a route that would cross the northern Yukon and pass through the Mackenzie Delta in the Northwest Territories before turning south. In 1976, that situation changed when a group of companies joined to sponsor the Alcan Project, a pipeline running across the southern Yukon and generally following the Alaska Highway.

The Board of Inquiry was established by the federal government in April 1977 to report on certain aspects of the proposed Alaska Highway gas pipeline. More specifically, the Inquiry was directed to prepare a preliminary report that identified the principal social and economic implications of the proposal and the attitudes of people in the Yukon to it. At about the same time, the federal government established an Environmental Assessment Review Panel to prepare a preliminary statement on the environmental implications of the same proposal. Both that panel and this Inquiry were directed to submit their reports by August 1, 1977.

This deadline was based on a timetable the Government of Canada had set for itself. The government proposes to decide in August 1977 which, if any, of the proposed pipeline routes through Canada it would be prepared to approve in principle. The government would then be in a position to inform the President of the United States of Canada's decision before September 1, 1977, having regard to the fact that the President is required by law to provide Congress with his recommendations on the pipeline question by that date.

To meet this timetable, the Government of Canada has proposed a two-stage process. This Inquiry, which terminates its work on August 1, represents the first stage. If approval-in-principle is given to the Alaska Highway pipeline proposal, the government will then establish a second inquiry to produce a final statement on the socio-economic impact of the proposed pipeline. Specific terms and conditions for regulating the construction and operation of the pipeline would be based on this final statement.

The timing of this preliminary report could not, therefore, be divorced from the government's timetable. If this Inquiry's report is to assist the government in reaching a decision, and not merely to provide an epilogue to that decision, no extension of time for the Inquiry process was feasible — unless the

government was prepared to defer its decision-in-principle on the pipeline. That fact, and the limited scope of this Inquiry's terms of reference, were not well understood by everyone when we began our hearings. We had to explain more than once that the preparation of a final socio-economic statement would be the task of a second-stage inquiry, and that the formulation of specific terms and conditions for the construction and the operation of the proposed pipeline did not form part of the mandate of our own Inquiry.

In addition to this difficulty, it must be stated that dissatisfaction was often expressed to us because the government had not established this Inquiry at an earlier date. The proposal to construct the Alaska Highway gas pipeline was filed in late summer 1976, and we were told that requests for some form of public hearings on the subject had been made as early as fall 1976. Because this Inquiry was not established until spring 1977, many participants in it felt that they had not had sufficient time to prepare their submissions. Some participants also complained because financial support for research and for community information programs had not been supplied earlier.

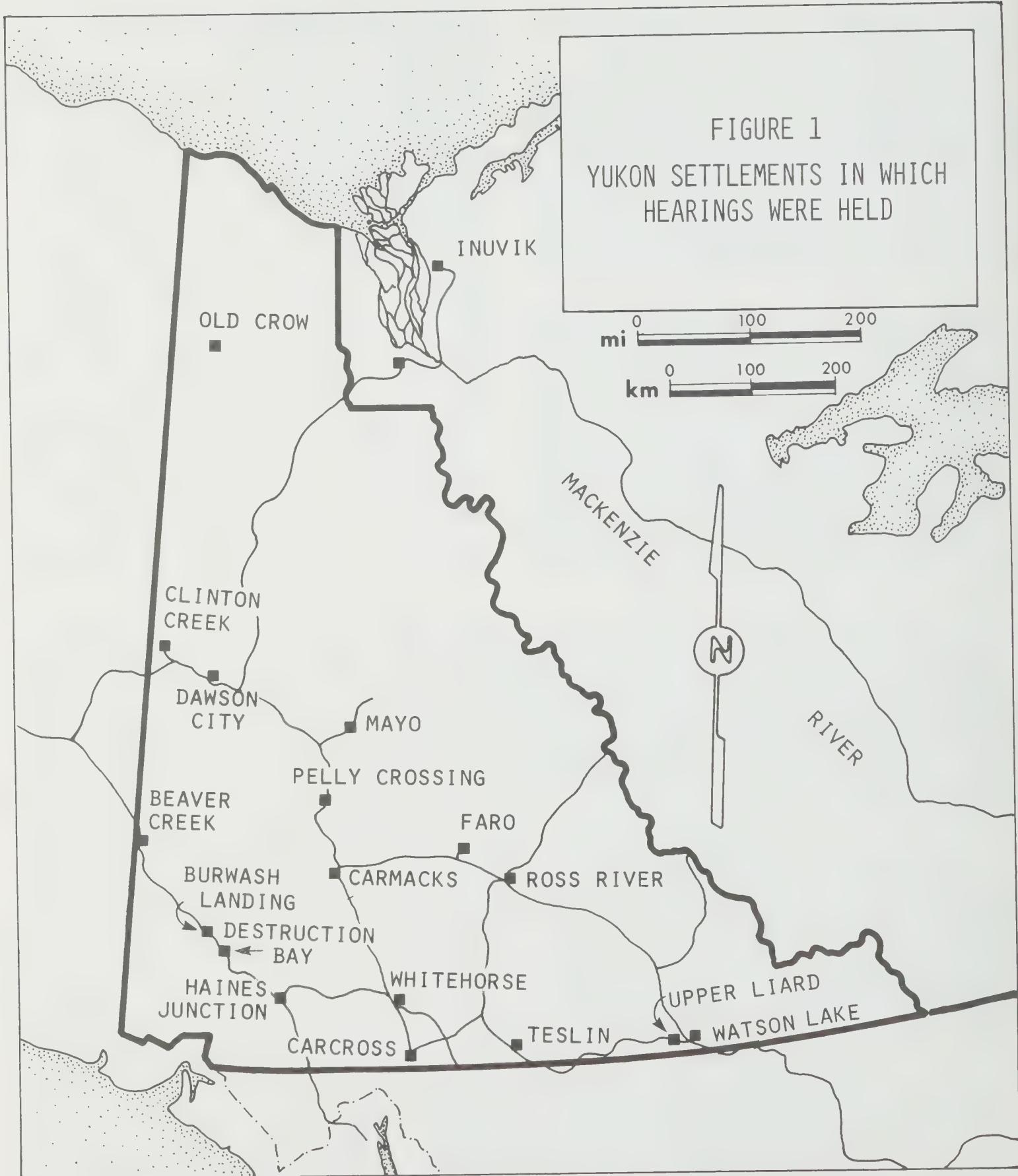
The participation of many groups that represent special interests was assisted by financial support that came, in part, from the Inquiry itself and, in part, from the Government of Canada. The Inquiry's task was greatly aided by the work of these organizations, which could not have participated as they did without such financial assistance. On the basis of our experience, we have no reservation in asserting the importance to our Inquiry, and to the inquiry process generally, of making funds available to such groups to enable them to prepare briefs and other submissions.

Despite the constraints of time and with the excellent cooperation of the participants in the Inquiry, we were able to gather a considerable amount of useful information. During 22 days, we held formal hearings in Whitehorse, at which experts testified and were cross-examined. In addition, the Inquiry held 27 days of informal hearings in Whitehorse, and in the 16 other Yukon communities shown in Figure 1, each of which is described in the community profiles that make up Appendix B of this report. Of a total of 576 witnesses who appeared before this Inquiry, 502 gave their testimony at the community hearings. The briefs, submissions, and exhibits filed, together with more than 7,000 pages of testimony, will form part of the permanent record of this Inquiry, a record that will be, we trust, of considerable value to anyone whose work is related in any way to the study of the social and economic life of the Yukon today.

FIGURE 1
YUKON SETTLEMENTS IN WHICH
HEARINGS WERE HELD

0 100 200 mi

0 100 200 km



The terms of reference of this Inquiry are set out in Appendix A of this report. They authorized public hearings only in the Yukon. However, during the course of the Inquiry, we visited Alaska and the Mackenzie Delta, and in both places we met informally with a number of organizations and individuals.

Reference was made above to the decision-in-principle that the Government of Canada proposes to take in August 1977 with respect to the proposed natural gas transportation system. The main options from among which it must choose (so far as the choice lies with and within Canada) are those illustrated in Figure 2.

The Alcan-Foothills project is depicted by the solid line in Map A of Figure 2. The whole pipeline would transport gas from the north coast of Alaska to the lower United States. The portion of it that runs across the southern Yukon, commonly referred to as the Alaska Highway pipeline, has been the subject of this Inquiry. The broken line on Map A represents another possible pipeline, known as the Dempster lateral, which would feed Canadian gas from the Mackenzie Delta area into the main pipeline system for delivery to Canadian markets. The Dempster lateral is discussed in Chapter 9 of this report. Another future possibility for moving Canadian gas from the Mackenzie Delta is indicated by the broken line on Map B of Figure 2, which shows Foothills' proposed Maple Leaf line.

The Canadian Arctic Gas project is shown on Map C in Figure 2. This pipeline would carry Alaskan gas across the northern Yukon to the Mackenzie Delta area, and from there the gas would move south along the Mackenzie Valley. This route was the subject of the Mackenzie Valley Pipeline Inquiry conducted by Mr. Justice T. R. Berger, volume one of whose report was published in May 1977.

Finally, the El Paso project is shown on Map D of Figure 2. It is sometimes described as the all-American route because it involves the transport of gas by pipeline from north to south Alaska, moving it from there, in liquified form, by tanker ships to California. The El Paso route could be used if the Canadian government decided not to approve any pipeline through Canada at this time.

More details about these proposed pipeline routes, together with a chronology of events related to them, may be found in Chapter 3 of this report.

Should the main gas pipeline be constructed across the southern Yukon, there are alternatives to the Alaska Highway route, which is marked on Figure 3 by the number 1. The route marked number 2 on that map is the Klondike Highway route, which is the "Dawson

diversion" preferred by the National Energy Board in its recent report, *Reasons for Decision Northern Pipelines*. Figure 3 also shows the Tintina Trench, which has been put forward on several occasions as a possible route, and was recommended to us for consideration by a number of witnesses. No company has yet applied to build a pipeline along either the Klondike Highway or the Tintina Trench, although the National Energy Board has conditioned its approval of Foothills' application upon the adoption of a route along the Klondike Highway. These alternative routes are considered in Chapter 4 of this report.

The fact that the Yukon Indian land claim remains unresolved is of critical importance to the question of constructing a pipeline anywhere through the Yukon. The implications of this fact are examined in Chapter 8 of this report.

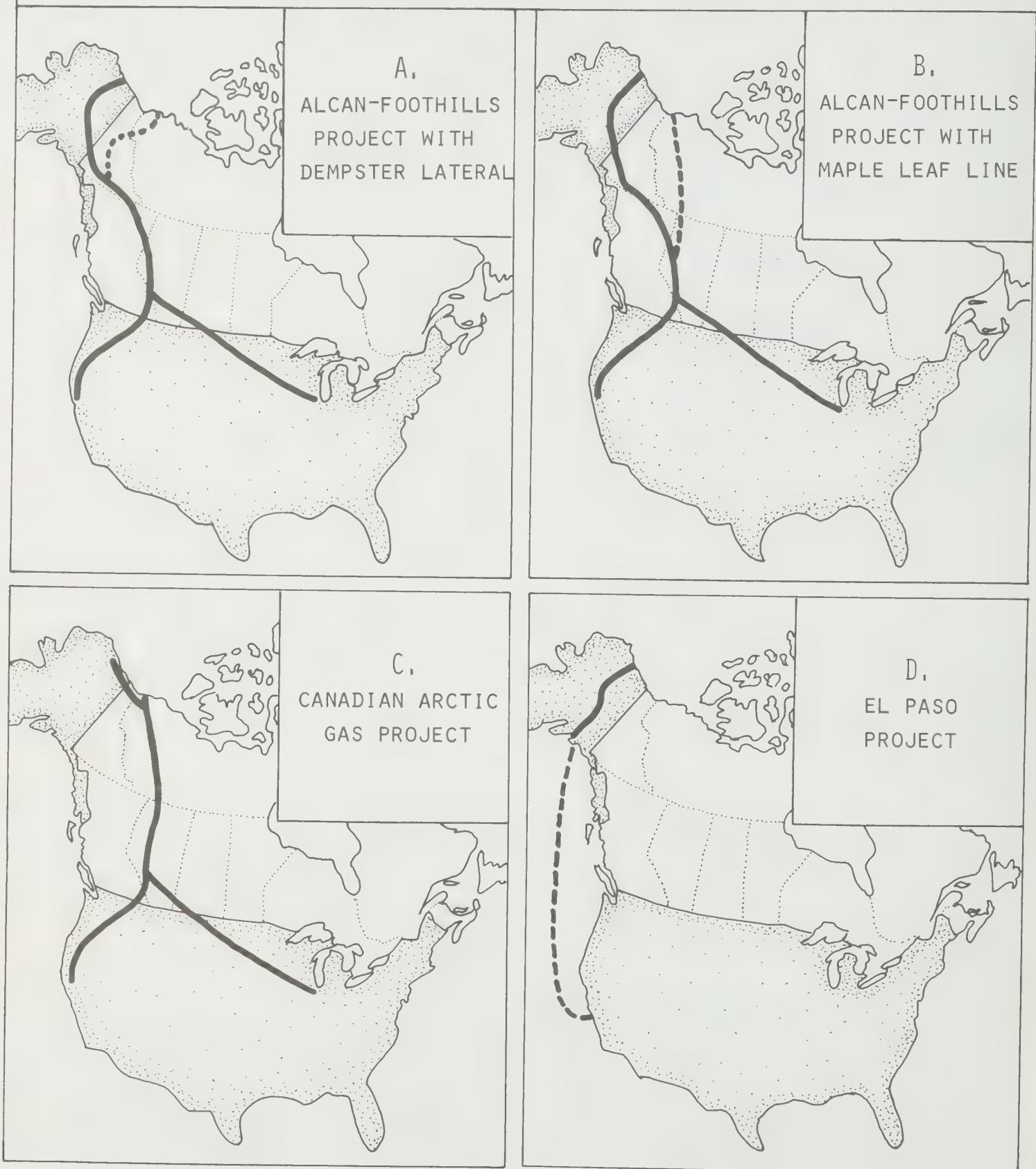
Some, perhaps many, Yukoners may be interested in working on a pipeline during both its construction phase and its operation and maintenance phase. Chapter 5 of this report contains certain recommendations designed to ensure that they have a fair opportunity to do so.

Economic and social impacts of the pipeline proposal are discussed, respectively, in Chapters 6 and 7. Central to the recommendations that we have made to minimize the undesirable consequences of the project is the establishment of a single planning and regulatory agency: this subject is developed in Chapter 10. Some negative impacts of a pipeline are inescapable and, taking account of this fact, we have made certain recommendations in Chapter 11 concerning compensation to Yukoners for the social and economic dislocations they may experience.

With respect to further examination of this subject, we hope that the record compiled through our hearings, together with the research conducted by the Inquiry's staff and this report, will provide useful information to others who are concerned with social and economic issues in the Yukon, whether or not the government approves construction of a pipeline here.

Quite apart from the information we have compiled, and apart from whatever merit the Board's recommendations may be thought to have, we believe that the process itself has served an important function. Our hearings throughout the Yukon were well attended, and the degree of participation was high. Many Yukoners had obviously devoted a great deal of time and thought to the preparation of their submissions. The presentation of differing views, which frequently involved deeply held convictions and values,

FIGURE 2
PROPOSED NATURAL GAS TRANSPORTATION SYSTEMS



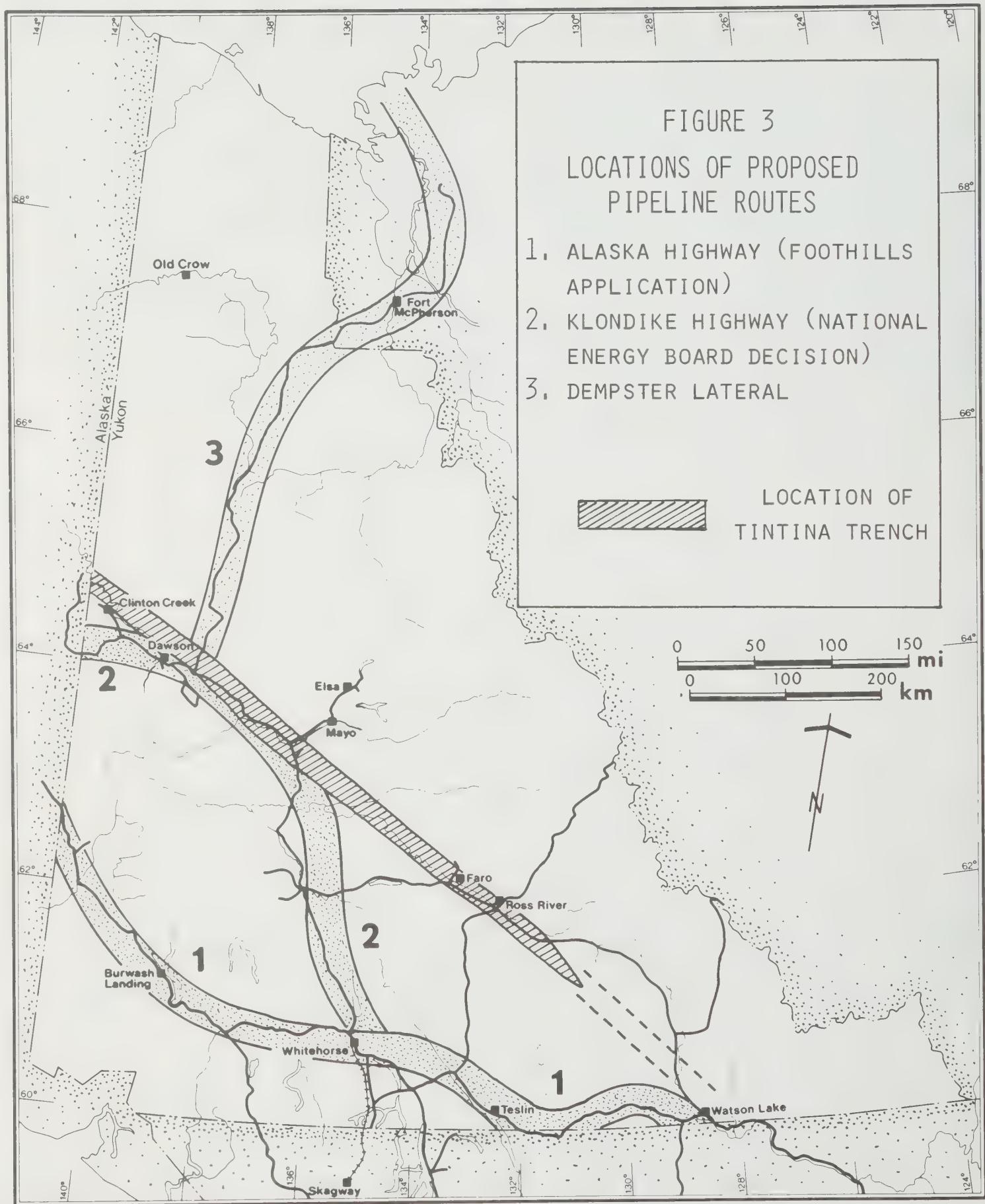
took place in a spirit of good will and of a genuine desire to gain and convey understanding.

The view had been expressed that public hearings of this nature, precisely because they involve issues on which there may be profound disagreement, are potentially divisive. That was not our experience. On the contrary, our impression was that the Inquiry, with the opportunity that it provided to air different points of view, frequently allowed those who attended or who followed reports of the hearings to gain fresh insights and a deeper understanding of why unanimity is not possible on all issues. The informal hearings, in particular, provided a forum at which all members of a community might come together to discuss common concerns in a way that does not often happen. The contribution to mutual understanding effected by the

informal hearings was in itself, we believe, a worthwhile achievement.

At the commencement of our hearings, the Board stated that the short life of the Inquiry, together with its crowded schedule, meant that the usefulness of what might be accomplished depended to a large extent upon the cooperation of the participants, and of Yukoners generally, in giving a high priority to the work of the Inquiry. We received that cooperation, and we wish here to acknowledge it gratefully.

Finally, we should note that this Inquiry's terms of reference permit any member of the Board to submit a minority report or a supplementary report. We have particular pleasure in stating that none of us has wished to take advantage of that provision. This report presents our unanimous views.



2 Historical Background



KL - The mining operation at Gold Run Creek in 1900 (Yukon Archives)

Miners work in cramped underground quarters on Bonanza Creek, 1898 (Yukon Archives)

Paddlewheelers docked at Whitehorse, June 1913 (Yukon Archives)

The Whitehorse rapids took their toll of boats and possessions as thousands of prospectors rushed down the Yukon River in search of gold (Yukon Archives)

Construction of the Alaska Highway by U.S. soldiers, 1942
(Yukon Archives)



The Land

The Yukon takes its name from the great river that dominates the geography of the territory. The Yukon River flows on across the whole expanse of Alaska, but its upper drainage branches throughout the interior plateau of the southern Yukon, an area surrounded on three sides by mountains. This plateau is slashed by long valleys, separated by low mountains that are always present above the horizon. The valleys and the rivers that flow through them, are well defined geographical units. North of the Yukon River drainage and the Ogilvie Mountains are Eagle Plain, Bonnet Plume Plain, and Crow Flats. The northern Yukon is drained by the Porcupine River, which flows west to join the Yukon River in Alaska, and the Peel River, which flows east to join the Mackenzie in the Northwest Territories. North of the British Mountains lies a narrow slope that drains into the Beaufort Sea. A small part of the southeastern Yukon drains into the Liard River, which swings south through British Columbia before joining the Mackenzie River at Fort Simpson. In the southwestern Yukon the Alsek River flows through Kluane National Park and into the Pacific through British Columbia and the Alaska Panhandle. Each river system flows out of the Yukon into a neighbouring jurisdiction. Many of the valleys, trenches and plateaus of the Yukon offer natural corridors between Canada and the United States.

Parts of the western Yukon were not disturbed by Pleistocene glaciation. If the Dawson area had been scoured by ice, the gold-bearing sediments of the Klondike would have been carried away, and the gold rush would never have happened.

Nowhere else in northern Canada is the fauna and flora so diversified as in the Yukon, where 22 distinct ecological regions have been defined. Because much of the Yukon is still wilderness, it claims some of North America's largest populations of barren-ground caribou, grizzly bears, Dall sheep, peregrine falcons, and snow geese.

The Indian People

The Indian peoples of North America crossed from Asia by a land bridge that once existed in the region of Bering Strait. Most of these migrants probably travelled through the Yukon toward the interior of the continent. Archaeological research has found evidence of Indian land use at Old Crow 30,000 years ago, at Kluane Lake 10,000 years ago, and on the Pelly River over 8,000 years ago.

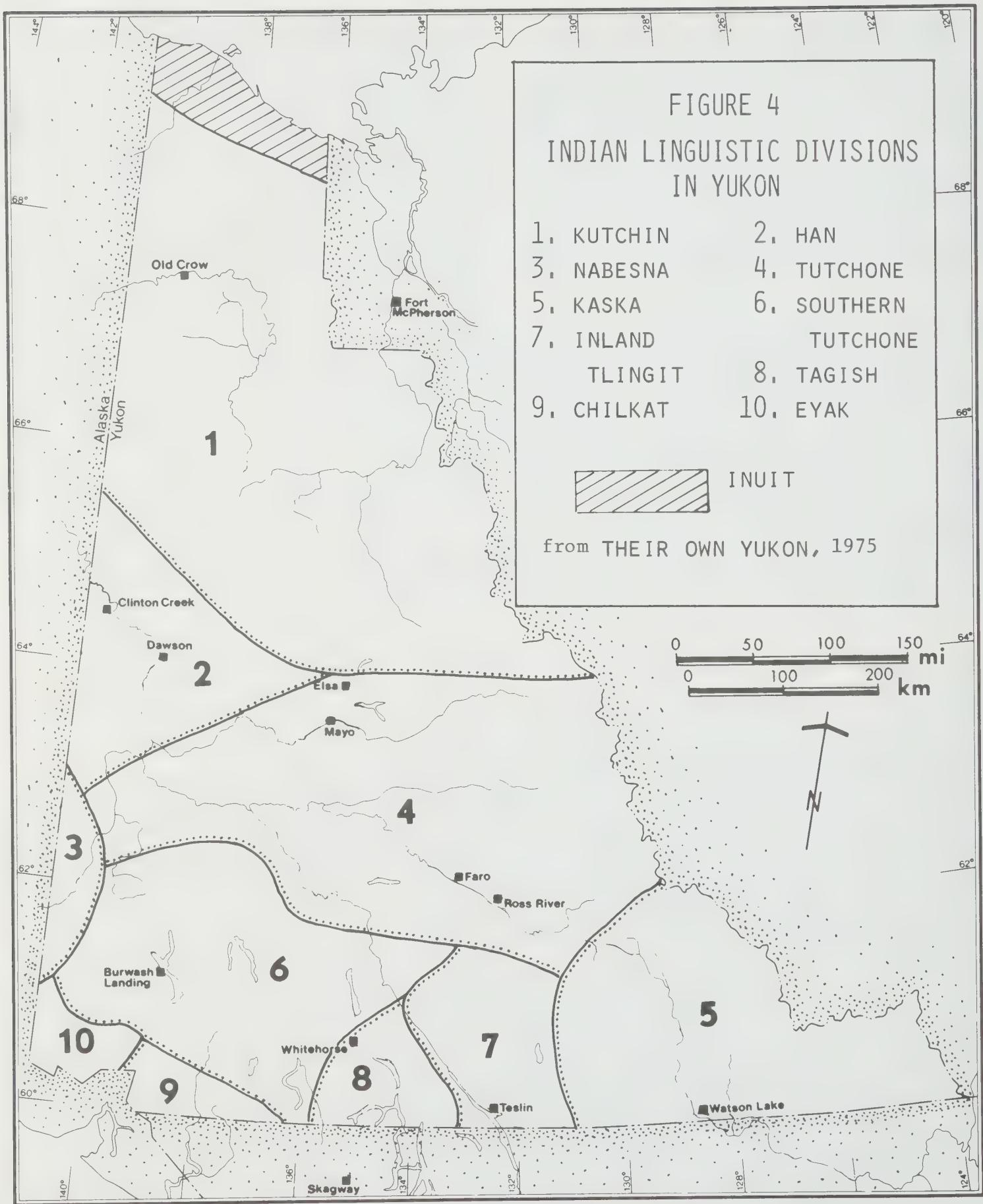
Three distinct cultural groups became established in the Yukon: the Inuit, the Athapaskans, and the Tlingit. Figure 4 depicts the linguistic divisions in the region. The Athapaskans are one of the most extensive Indian-language groups in Canada, extending traditionally from the Alaska border to Hudson's Bay. The northern Athapaskans were subsistence hunters who traditionally lived in small bands or extended family groups and spent most of the year on the move. The Yukon Tlingit are an inland branch of a North Pacific coastal group who live along the Alaska Panhandle and in northwestern British Columbia. Trading patterns were well-established among these tribes before they had any contact with White traders. The Kutchin of the northern Yukon exchanged copper and other goods with the Inuit on the Arctic coast. There was also a precontact tradition of the tribes on the Pacific coast trading with the inland people. Certain of these aboriginal trading patterns were re-inforced by European contact.

The Fur Trade

The fur trade on the North Pacific coast initially focussed on the sea otter. After the depletion of that species, the coastal Tlingit began trading with interior Indians for other furs, thereby initiating an energetic expansion of a trade in which they were the prosperous middlemen. The Tlingit traders were determined to monopolize face-to-face dealings with the foreign traders, and stories are still told of battles fought between the Tlingit and some Athapaskan groups who tried to establish direct relations with the traders on the coast.

The fur trade entered the Yukon from two directions: initially from the west with the Russians and other traders along the coast and, secondly, and more decisively, from the east with the Hudson's Bay Company. The Hudson's Bay Company sent Robert Campbell to find a large river, known by Indian reports to flow westward. In 1842, he established Fort Frances the first Hudson's Bay Company post in the Yukon, and in 1848 he built Fort Selkirk near the junction of the Pelly and Yukon rivers. Fort Selkirk was captured and razed in 1852 by a party of Chilkat Indians determined to protect their trading monopoly.

About the same time, John Bell travelled from the Mackenzie Delta to the Porcupine River and down it to the Yukon River. In 1847, Alexander Murray established Fort Yukon, a post that had to be moved because its location was well to the west of the 141st



meridian, which was established by treaty as the Yukon-Alaska border. Only in 1851 did Campbell discover the true course of the Yukon River. Before that date, its upper and lower stretches had been thought to belong to different rivers.

The fur trade in the Yukon, as in the rest of northern Canada, changed the position of Indian groups. They became integrated into an externally controlled economy that supplied them with valuable new technology in exchange for furs. While their relationship to the land did not fundamentally change, the independence of their economy was ended. The fur trade became the basis of economic life for the northern Indians, one which did not separate them from their land but reinforced their reliance upon it. The trappers had, by all accounts, a viable – even, at times, a prosperous – economy that continued until the 1940s.

The Gold Rush

The Klondike gold rush is the best known event in Yukon history. At its height, Dawson was the largest Canadian city west of Winnipeg. Its glory was second only to San Francisco's.

The boom was sudden and suddenly over. Dawson had had, for a short time, a population of almost 30,000, more than the present population of the Yukon. The Indian people were involved in the initial discovery and, to some extent, in the life of Dawson, but the gold rush and gold mining were extremely localized phenomena, and had little impact on the Indian land-based economy of the Yukon as a whole.

The trail of '98 came up from Skagway, following some of the old Indian trading routes across the mountain passes. The gold rush led to the construction of the White Pass & Yukon Railway in 1900 from Skagway to Whitehorse. From there, transportation followed a water route down to Dawson.

By 1910, the gold rush population was gone. During the period between 1910 and 1940, the Yukon, in comparison with other parts of northern Canada, had developed a comparatively good system of communication and transportation, and had a relatively large number of permanent, if small, settlements. There was no great influx of residents from the south, nor were the Indian people drawn more firmly into dependence on industrial activity. The population was more or less stable, and renewable resources were prominent in the Yukon economy.

Highways and Pipelines

In the early 1940s, with a suddenness reminiscent of the gold rush, construction began on the Alaska Highway, the airstrips of the North West Staging Route, the Canol Road, and the Canol Pipeline. These projects were part of the war effort; there was no time for lengthy debates or weighing of alternatives. Between 1942 and 1944, the Alaska Highway from Dawson Creek, British Columbia, to Fairbanks, Alaska, a distance of 1,532 miles, and an oil pipeline from Norman Wells, on the Mackenzie River, to Whitehorse and Fairbanks, were built by a large civilian and military labour force from the United States.

Whitehorse was one of the main distribution centres of manpower and materials, and its population rose almost overnight from about 700 to 40,000. For a time, the city was virtually a military camp, and one needed a permit to enter or leave. At first, the right-of-way of the highway was under military control, and only military vehicles could use it. Once again, the Yukon had experienced a massive, but temporary, invasion of southerners.

During the period of construction, many Yukoners modified their seasonal pattern of activity and movement. Many trappers gave up their trap lines and the network of cabins they had maintained to run these lines, and they moved with their families to live in or near the construction camps. A large part of the Yukon population moved to new locations at crossroads and highway intersections, such as Stewart Crossing, Johnsons Crossing, and Haines Junction. The old pattern of settlement had followed the principal waterways of the region, for they had formerly been the main arteries of transportation, but the new pattern of settlement followed the easier and cheaper means of transportation offered by all-weather roads.

The north-west south-east river transportation route used during the gold rush now took second place to a roughly east-west corridor through the southern Yukon. The road had many effects. It opened the Kluane region and, because of overhunting during the construction period, the Kluane Game Sanctuary was established in the 1940s. It established Whitehorse as the site of an oil refinery and the focal point for several pipelines (see Figure 5). Eventually, in 1953, it led to the change of the capital city from Dawson to Whitehorse, a victory of road over river transportation. The Alaska Highway created new roadside settlements, such as Beaver Creek, Haines Junction, and Watson Lake. It resulted in the growth of Indian settlements at Upper Liard, Teslin, and Burwash Landing. Today, approximately 80 per cent of the Yukon population

lives along the Alaska Highway. Today every Yukon settlement, with the exception of Old Crow, can be reached by road.

The impact of the Alaska Highway's construction was magnified for the Indian people because it coincided with a drop in fur prices that undercut the land-based economy throughout the Canadian north. Ms. Julie Cruikshank, an anthropologist who testified before the Inquiry, explained the significance of the coincidence.

In 1942, fur prices were lower than they had been for many years. Many Native families who traded at posts near the new highway route (Teslin, Champagne, Burwash Landing) decided, for the first time, not to trap that winter, but rather to remain at the post or go to Whitehorse to seek employment related to highway construction. After the highway was completed, many of these people continued to live year round along the highway where they were joined by other Natives. A steady drift of Natives from all over the Yukon to the margins of Whitehorse began with the building of the highway and has continued ever since (E-82-18).

The migration of Indians toward the highway increased these problems by concentrating the population, which led to the overharvesting of areas near the highway. In this way the highway directly contributed to a strain on the renewable resource base.

In the years immediately following construction of the highway, the federal government expanded social welfare services provided in the Yukon. Because of the Yukon's accessibility, a far greater proportion of the Yukon Indian population was provided with these services than in the Northwest Territories or even in the northern areas of the provinces.

Indian witnesses from the communities along the Alaska Highway almost always described the highways as having had an impact from which their communities have not yet recovered. The events of that period clearly brought changes to the Indian people of the southern Yukon that were more fundamental and more traumatic than any they had previously experienced. It was, perhaps, comparable to the rush of agricultural settlers into the southern prairies in the late 19th century. It certainly has no parallel in other parts of the Canadian north.

The events surrounding the construction of the highway were of fundamental importance for all Yukoners. They mark the beginning of a permanent non-Indian majority in the Yukon population. The transportation system of roads laid a groundwork for future changes. The gold rush had come and gone and had left little mark other than the city of Dawson. But

with the highway, the effects of change became cumulative.

The Diversification of the Yukon Economy

The highway boom was followed by a relatively short period of stagnation. In the early 1950s, the federal government supported mining and the construction of other roads in the territories, often sharing costs with private firms. In 1957, the federal government announced a special program for the Yukon under which it would pay the full cost of certain roads and assume 85 per cent of the cost of their maintenance. A year later the policy was expanded to other northern areas through a program called "Roads to Resources". The promise of mining developments seemed to come true in the 1960s, but only with substantial government aid. By 1967-68, the Clinton Creek mine, northwest of Dawson, had opened with \$4 million in government assistance. The government paid one-third of the cost of bringing the Cyprus Anvil mine near Faro into production in 1969, an operation that now constitutes 40 per cent of the Yukon economy.

The Yukon economy today remains heavily dependent upon extractive industries. Both the federal and territorial governments play a pervasive role in the economy. The communication and transportation systems are far superior to those of other areas of northern Canada. The population is more stable, and the economy is more diversified.

The Unresolved Issues

The Indian Economy

With the decline in fur prices and the movement of Indians toward highway settlements, the older Indian economy was undercut. The Yukon economy today has not provided steady wage employment to all Yukoners, and a common view is that the Indian communities, in particular, suffer from the current slack in the economy. It appears that a pattern of casual or part-time wage employment, combined with seasonal or occasional hunting and trapping, has developed, a pattern not fully understood by most observers. We will return to this subject in Chapter 7.

There are basic questions to be resolved about the allocation of resources among Yukoners. Mr. Johnnie Johns, a famous Indian guide who was born in Tagish in 1898, summarized the background to the issues that face Yukon society today.

At one time, Tagish was a big Indian settlement. Before the highway Indians camped on both sides of those narrows and it was generally known as Indian land. After the road, the Territorial Government gradually took that land away from the Natives so that now Indian Affairs owns only one lot, where my sister lives. Six miles from Tagish at Little Atlin Lake used to be a community trapline for people from Tagish and Carcross. In 1950-51, the government made that an individual trapline and gave it to Patsy Henderson, a well known Indian man. When he died, his wife passed it on to a grandson who sold it. So Indians lost all that land.

I had corrals right next to that where the government has now built a tourist campground. First, the Army burned my corrals for wood, so I rebuilt them further back and they burned them too. Finally, the Territorial Government took the land and made it into a campground. All the Indian land around there went in the same way after the road came through. The Territorial Government took it all and leased it. In those days Indians were treated like dirt.

That was one reason I became enfranchised – gave up my Indian status – so my kids could go to better schools, so I could run my business, so I could be treated like a human being.

It's hard to describe how the highway really changed things. Let me put it this way. I remember one time in 1917 I went to visit my brother-in-law's parents for the first time. That was in the Teslin country. They were camped near Teslin Lake and they hadn't been to town for six months. They were a proud people. They told me not to use my dog food, that I needed it and I should use theirs. They had canned fruit, etc. set aside for special occasions, and they brought that out. If my moccasins looked old, I'd find a new pair waiting for me in the morning. I was a guest. All Indians were proud in those days.

Now that's all gone. Some of the old people are still that way, but not the younger people. All that began to change with the highway (MVPI 151-23145).

Before construction of the Alaska Highway, little of the Yukon land had been taken over by non-Indians. With the expansion of the non-Indian population, which began in the 1940s, lands that the Indians had always used began to be lost to them. A transfer of resources was taking place, but one, apparently, that the legal and political systems established in the Yukon did not recognize as a transfer. This change was taking place during a time when the Indian people and their economy had received a severe blow with the fall in fur prices. Even the work of supplying wood for fuel to the paddlewheelers had ended with the construction of the Klondike Highway in the 1950s. These events established, perhaps for the first time, contradictory views of the future of development in the Yukon. Grafton Njootli, Vice-Chairman of the Council for Yukon Indians, stated in his evidence:

What non-Native Yukoners see as progress, we see as destruction of our values and our way of life (4-547-48).

Other witnesses, such as Mr. Ken McKinnon, an elected member of the legislative assembly and responsible in the Executive Committee for local government, were anxious that the pipeline issue should not polarize Yukon society on racial lines.

There is a clear tendency toward such a polarization, and it has roots in the economic history of this region. For this reason, a just settlement of the Yukon Indian land claim, which we discuss in Chapter 8, is of great importance for present and future development in the Yukon.

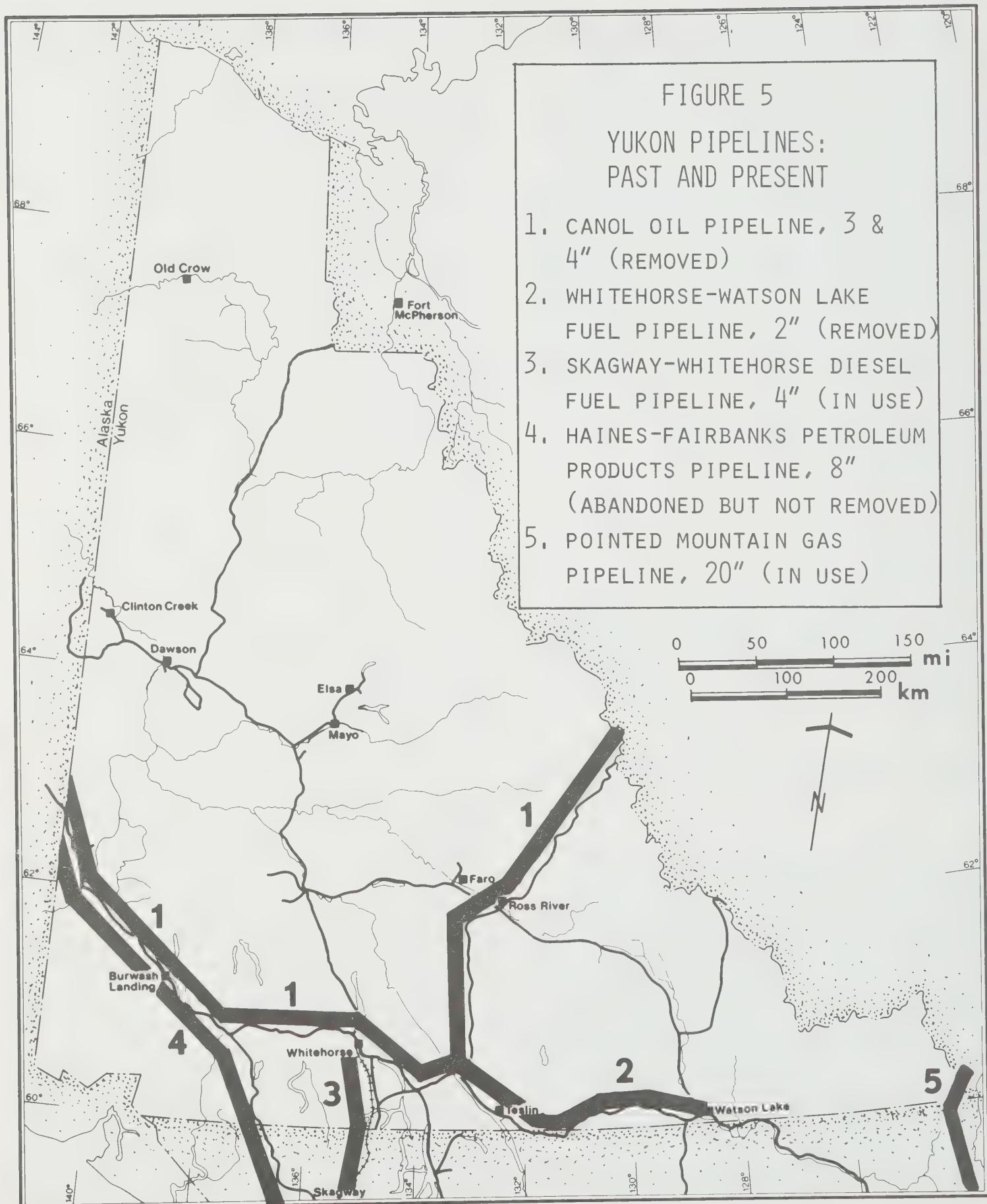
Responsible Government in the Yukon

The Yukon was created as a separate territory in 1898. The first wholly elected territorial council was established in 1908. As the population of the Yukon declined following the gold rush the territorial council was reduced in size, but it continued to meet in the Yukon. In contrast, the Northwest Territories at that time had a wholly appointed council, which met in Ottawa. Only in 1951 were three of the eight members of the Northwest Territories Council elected, and they did not have a wholly elected assembly until 1975.

The present number of elected representatives in the Yukon legislative assembly is being increased from 12 to 16, and electoral boundaries are being redrawn in part, with a view to increasing the opportunities of Indians to elect representatives of their own. In the long history of elected assemblies in the Yukon, no Indian has ever been elected.

Aside from the failure to involve the Indian people in the government, however, the White population of Yukon has demonstrated through more than 50 years of experience that they can, and do, run local government effectively. Their municipal governments, as well as the Government of Yukon, are comparable in most respects to the corresponding institutions found in the provinces. In recent years, Yukoners have received recognition of their capacity for self-government, particularly in the involvement of some members of the legislative assembly in executive government through the establishment of a type of cabinet system. The jurisdiction of the Government of Yukon also continues to expand slowly toward the objective of parity with provinces. With the anticipated emergence of party politics in the near future, many expect that the evolution of responsible government in Yukon will continue.

Wholly responsible government has been the objective of the Yukon legislative assembly for about 20 years.



The limitations on the authority and power of the legislative assembly restrict its effectiveness in self-government. One significant example is that the resources of the Yukon remain the property of the Crown in right of Canada, and only the federal government can legislate on these matters. In other parts of Canada, the provincial governments are responsible for land management.

The federal government, in fact, wields a great deal of power through all of its programs, but primarily through those of the Department of Indian Affairs and Northern Development. Besides managing resource development, this department of the federal government approves the Yukon budget before the legislative assembly finalizes it; the Yukon Forest Service and Northern Canada Power Commission are both supervised from Ottawa. Other federal departments that assume responsibility usually held by provincial governments are the departments of National Health and Welfare, Justice, and Public Works. The Advisory Committee on Northern Development, which represents all federal departments with activities north of the 60th parallel, coordinates all of these northern activities from Ottawa, sometimes with less than complete success. The Yukon's participation in the decision-making process is, therefore, often less than what many Yukoners would consider effective. As one former commissioner said: "You can't drive a team of horses with reins 3,000 miles long."

Yukoners look forward to the time when control over the land and natural resources of the Yukon will be transferred to the Government of Yukon. It is now clear that these twin goals – responsible government and

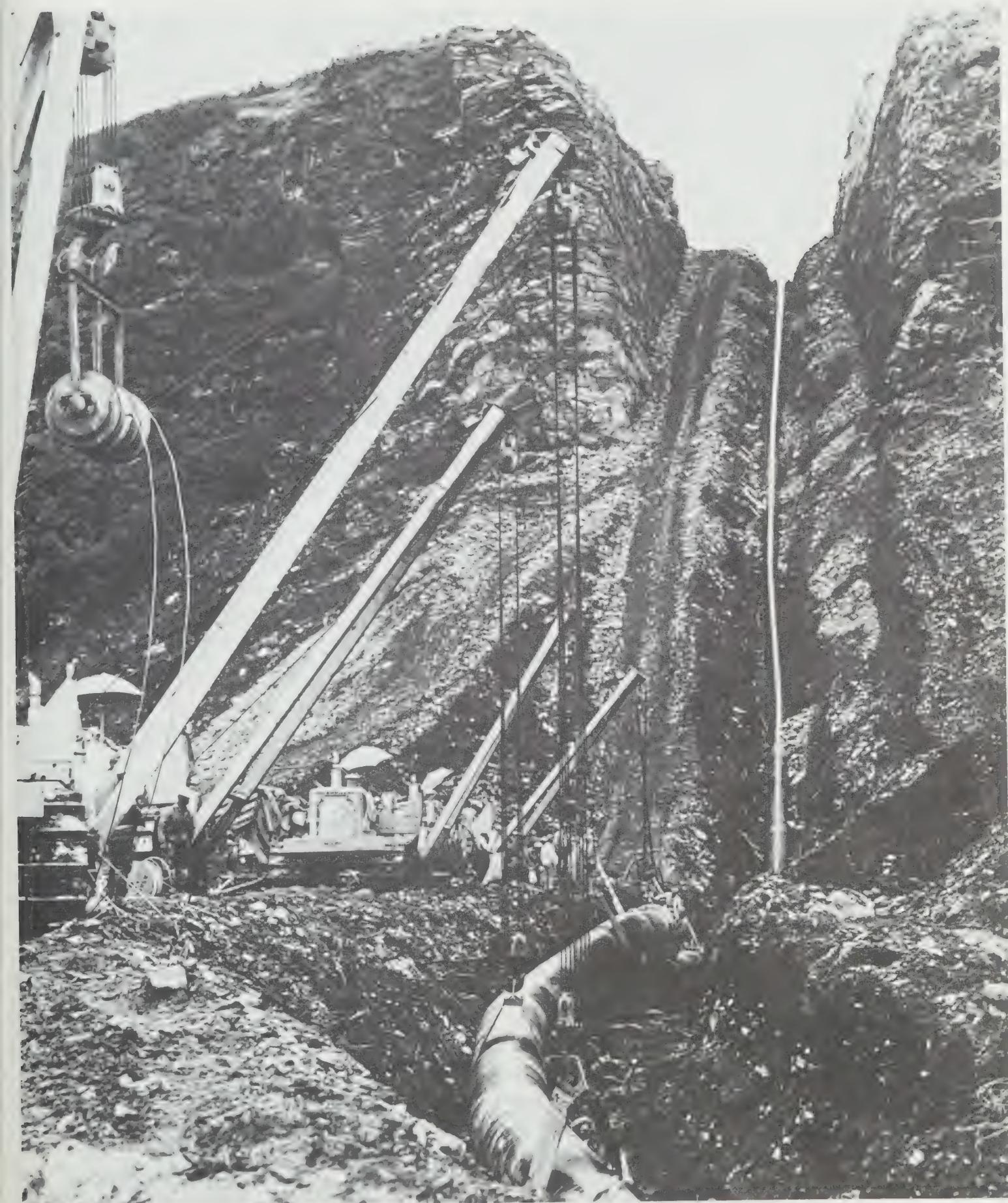
local control of resources – cannot be achieved without the resolution of the Indian land claim, for the claim seeks more than simply a share in resources. It seeks, as well, meaningful Indian self-determination within a single territorial government system.

The Distinctiveness of the Yukon

The geography of this region sets it apart from the Northwest Territories. The transportation and communication systems have long been superior to those in any other part of the Canadian north. Demographically, the Yukon is unique. Like Canada as a whole, the small Yukon population is urbanized and heavily concentrated in the southern part of the territory. Unlike the Northwest Territories and the prairies, there is no Metis population here. Unlike most of the north, there has been a pattern of intermarriage which, because of the definition of "Indian" in the Indian Act, has produced a large population of non-status Indians, perhaps equal in number to the population of the status Indians. The relations between status and non-status Indians seem markedly better here than in any other part of the Canadian west or north. The two groups are united in negotiating their land claim with the federal and territorial governments.

Yukoners are very conscious that many southern Canadians tend to look upon the north as a vast homogeneous land. But northern development and serious planning can be based only on a recognition of the uniqueness of the Yukon and an appreciation of the character of this region of Canada. Many of the northern stereotypes simply do not apply here, as we hope this report will show.

3 The Project



Pipe being lowered into trench on trans-Alaska oil pipeline. Similar techniques are proposed for natural gas pipeline construction (Alyeska)

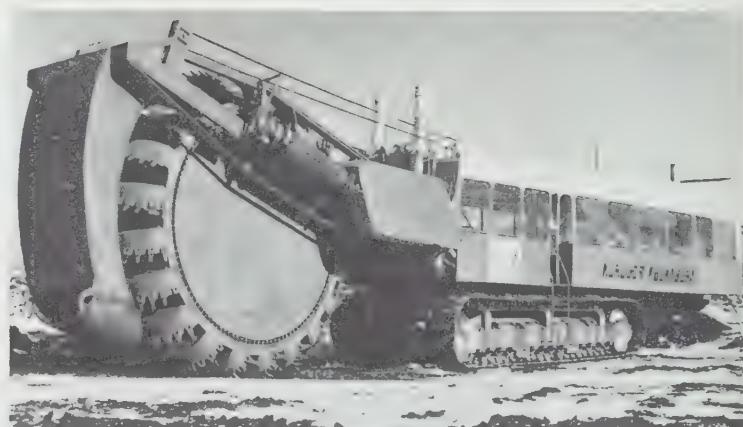
Foothills President, Robert Blair, appears before the Alaska Highway Pipeline Inquiry in Haines Junction (Whitehorse Star)

Alaska Highway Pipeline Inquiry Staff and Upper Liard residents recess from hearings to chat outside hearing hall (Yukon Indian News)



Ditching machine used to dig pipeline trench (Alyeska)

Above-ground section of Trans-Alaska pipeline (Alyeska)



To understand both the genesis of this Inquiry and the decisions the Government of Canada must take with respect to this pipeline and other northern gas pipelines, it is helpful first to consider their historical context. The relevant chain of events spans a decade, a decade that has seen the birth and, in some cases, the death of a variety of proposals to bring northern natural gas to market.

Central to the task of this Inquiry is the proposal by a group of companies, led by Foothills Pipe Lines Ltd., to build a pipeline from Alaska to the continental United States across the southern Yukon. The social and economic impacts of this proposal on the Yukon will be a crucial factor in the government's decision on whether or not it may be built in the near future. Any analysis of these impacts demands an appreciation of the magnitude and dimensions of the proposed pipeline project, and to these aspects of it we shall turn in a moment.

First, however, let us review the chronology of events that has led to the proposal with which the government is now faced.

- 1968 Atlantic Richfield strikes oil and gas at Prudhoe Bay on the North Slope of Alaska. The fields are said to be the largest in North America and among the ten largest in the world.
- 1969 The Northwest Project Study Group, composed of TransCanada PipeLines Ltd. and several major American petroleum companies, commences intensive research and feasibility studies, which focus on the construction and operation of a large-diameter gas pipeline from Prudhoe Bay via the Mackenzie Delta to markets in the midwestern United States and eastern Canada.
- 1969 The Alberta Gas Trunk Line Company Ltd. (AGTL) initiates the formation of the Gas Arctic Systems Study Group. Gas Arctic's function is to consider the construction of a gas pipeline from Prudhoe Bay to the midwestern United States through the Yukon, the Northwest Territories and Alberta.
- 1969 In response to the Prudhoe Bay discovery, a consortium, Mountain Pacific Pipeline Ltd., is formed to consider the construction of a gas pipeline from Alaska to the midcontinent through the southern Yukon and British Columbia. Westcoast Transmission Company Ltd., later a member of the Foothills group, is part of this consortium. After a few years, because of the lack of financial backing, this consortium becomes inactive.
- 1970 Imperial Oil Ltd. strikes oil and gas at Atkinson point in the Mackenzie Delta.
- 1970 Each of the two competing consortiums, Northwest Project Study Group and Gas Arctic Systems Study Group, focuses on bringing American gas from Prudhoe Bay and Canadian gas from the Mackenzie

Delta to southern markets in the United States and Canada.

- 1970 In August, the Minister of Indian Affairs and Northern Development and the Minister of Energy, Mines and Resources jointly announce guidelines for the building of northern pipelines. These guidelines establish requirements related to environmental protection, pollution control, Canadian ownership and participation, and the training and employment of northern residents.
- 1972 In March, the Government of Canada states its objectives, priorities, and strategies for the Canadian north in the 1970s in the following terms: "The needs of the people in the North are more important than resource development and . . . the maintenance of ecological balance is essential."
- 1972 In June, the Government of Canada provides further direction to companies engaged in research and planning for northern pipelines. These expanded guidelines describe the corridors along which pipelines may be built and address their environmental and social implications.
- 1972 On June 1, the Northwest Project Study Group and the Gas Arctic Systems Study Group amalgamate to form the Canadian Arctic Gas Study Ltd. (CAGSL). It proposes to build a gas pipeline from Prudhoe Bay across the northern Yukon to the Mackenzie Delta, then south along the Mackenzie Valley and across Alberta to the continental United States. CAGSL is responsible for the Canadian portion of this proposal. A sister company, Alaska Arctic Gas Study Ltd., is responsible for the Alaskan segment. Together they form the Arctic Gas Project.
- 1974 On March 21, CAGSL files applications with the National Energy Board and the Minister of Indian Affairs and Northern Development to seek approval for the Canadian segment of this proposal. On the same day, its sister company files an application for the Alaskan segment with the Federal Power Commission in the United States. The project is intended to carry American and Canadian gas to consumers in both nations.
- 1974 On March 21, the Government of Canada appoints Mr. Justice T. R. Berger
 - ... to inquire into and report upon the terms and conditions that should be imposed in respect of any right-of-way that might be granted across Crown lands for the purposes of the proposed Mackenzie Valley pipeline having regard to:
 - (a) the social, environmental and economic impact regionally, of the construction, operation and subsequent abandonment of the proposed pipeline in the Yukon and the Northwest Territories, and
 - (b) any proposals to meet the specific environmental and social concerns set out in the Expanded Guidelines for Northern Pipelines as tabled in the House of Commons of June 28, 1972 by the Minister [of Indian Affairs and Northern Development].

1974 In September, AGTL withdraws from the Canadian Arctic Gas consortium to join with Westcoast Transmission Company to form Foothills Pipe Lines Ltd. to advance the Maple Leaf Project, a proposal for an all-Canadian gas pipeline from the Mackenzie Delta along the Mackenzie Valley to Alberta. No provision is made to join this line with the Alaskan gas fields.

1974 On September 24, El Paso Alaska Company files an application with the Federal Power Commission in the United States to operate a trans-Alaskan gas pipeline and then to carry liquid gas from Point Gravina, on the south coast of Alaska, by tanker to southern California. The gas would then move through conventional pipelines into the mid-continent.

1975 In March, Foothills Pipe Lines Ltd. files an application for the Maple Leaf Project with the National Energy Board and the Minister of Indian Affairs and Northern Development.

1975 Public hearings on the Arctic Gas project and the El Paso Alaska project begin in Washington, D.C., on May 5 before Administrative Law Judge Nahum Litt of the Federal Power Commission.

1975 On July 4, the Minister of Indian Affairs and Northern Development asks Mr. Justice Berger to examine those aspects of the Maple Leaf Project that differ from the Arctic Gas Project.

1976 On May 5, Foothills Pipe Lines Ltd., AGTL, Westcoast Transmission Company, and Northwest Pipeline Corporation agree to sponsor a pipeline system to transport Alaskan gas to American markets via an overland route across Canada. This proposal calls for a 42-inch-diameter pipeline running from Prudhoe Bay south to Fairbanks, Alaska, then along the Alaska Highway through the southern Yukon and northern British Columbia, and south through Alberta to the 49th parallel. This project becomes known as the Alcan Project.

1976 On August 31, applications are filed with the National Energy Board and the Minister of Indian Affairs and Northern Development to construct the Canadian segment of the Alcan Project. A corresponding application is made to the Federal Power Commission in the United States to build the American segment.

1977 On January 28, Canada and the United States sign a Transit Pipeline Treaty to confirm a policy of non-interference with and non-discrimination for pipelines carrying petroleum products across one another's territory. This treaty will become effective only upon ratification by the governments of both nations.

1977 On February 1, after 253 days of hearings, Judge Litt of the United States Federal Power Commission issues an initial decision recommending approval of the Arctic Gas Project. He does not give full approval to the El Paso Alaska Project, and he rejects the Alcan Project as uneconomic.

1977 On February 28, the Alcan Project is redesigned to provide a 48-inch diameter express gas pipeline to carry Alaskan gas across Canada to the continental United States. The route, at least down to the 60th parallel, is to be the same as that of its 42-inch predecessor. The sponsoring consortium files applications for the revised project with the National Energy Board, the Minister of Indian Affairs and Northern Development, and the Federal Power Commission of the United States.

1977 On April 19, the Alaska Highway Pipeline Inquiry is established by the Minister of Indian Affairs and Northern Development to examine certain aspects of the revised Alcan Project and to submit its report by August 1. The Inquiry's terms of reference require it to identify the principal social and economic implications of the Alcan Project, possible deficiencies in its application, and possible action that might be taken to meet major concerns that are identified, and to correct any major deficiencies in its application. The Inquiry is also required to report on the attitude to the project of the inhabitants of the region it would affect.

The Minister states that, if the Alcan Project is approved in principle, the Government of Canada will establish another inquiry to produce a final socio-economic impact statement on which the terms and conditions for the construction and operation of the pipeline will be based.

The Minister of Fisheries and the Environment establishes a separate group, the Environmental Assessment Review Panel, to assess the environmental impact of the Alcan Project.

The Minister also states that the Government of Canada expects to make a decision-in-principle on northern pipelines in August 1977.

1977 On May 2, the United States Federal Power Commission reports unanimously in favour of an overland route through Canada to bring Alaskan gas to market. The El Paso Alaska Project is not favoured, but it is not entirely rejected. In preferring an overland route, the four members of the Commission are divided equally between the Alcan Project and the Arctic Gas Project.

1977 On May 9, volume one of Mr. Justice Berger's report is tabled in the House of Commons by the Minister of Indian Affairs and Northern Development. It recommends a ten-year moratorium on the building of any pipeline in the Mackenzie Valley, a permanent moratorium on all pipelines across the northern Yukon, and it suggests that there may be fewer environmental difficulties with the Alcan Project.

1977 On July 4, the National Energy Board recommends approval of the Alcan Project. However, the board suggests a major change in the route of the project to move it away from the northern part of the Alaska Highway corridor. The board recommends a route across the Yukon to Dawson, south along the Klondike Highway to Whitehorse, then into British

Columbia along the Alaska Highway. This recommendation would make the route compatible with the early construction of a pipeline along the Dempster Highway to connect the Canadian gas reserves in the Mackenzie Delta with the Alcan pipeline. At the same time, the National Energy Board rejects both the Arctic Gas Project and the Maple Leaf Project.

1977 On August 1, the Alaska Highway Pipeline Inquiry submits its report to the Minister of Indian Affairs and Northern Development.

The Government of Canada has indicated that it will communicate its decision on northern pipelines to the President of the United States by September 1, 1977. The President will then choose between the project (if any) that Canada is prepared to permit and the El Paso Project.

pipeline are approximately \$7.3 billion. Even without cost overruns, which many critics say will be substantial, this sum far exceeds the cost of any existing gas pipeline.

The proposed pipeline will be buried throughout its length, rising above ground only at the compressor stations and metering stations. Because of permafrost, the gas in the pipeline will be chilled between Prudhoe Bay and a point about 50 miles inside the Alaska-Yukon border. This technique, relatively untried for large-diameter high-pressure gas pipelines, is considered necessary to maintain the stability of the frozen ground through which the pipeline will pass.

By any measure, this proposal represents a major undertaking. The proposed pipeline would be longer and larger than any existing gas pipeline in North America, and it would be far more expensive. It has novel features that carry certain risks, for many aspects of its proposed construction are without precedent. If problems in its construction should arise, the standard solution to them, suggested by those advancing the proposal, appears to be additional manpower. This possibility must, of course, be considered in evaluating the potential impact of the project.

In attempting to analyze the impact of the Alcan Project in the Yukon, its Yukon dimensions must be considered in more detail. The proposed route through the Yukon covers 513 miles and would cost \$1.3 billion. It would cross the Canadian border at Beaver Creek, run southeast across the Yukon, and enter British Columbia southeast of Watson Lake. The pipeline's 120-foot-wide right-of-way will follow approximately the route of the Alaska Highway so that the road can provide access both for its construction and operation.

Scheduling

Foothills Pipe Lines (Yukon), which would build the Yukon segment of the project, has provided the Inquiry with a proposed schedule for its preconstruction and construction activities. Its application to the National Energy Board and the Minister of Indian Affairs and Northern Development indicates that work would begin in the last quarter of 1977 and continue through October 1981, when gas is scheduled to flow through the pipeline. Any assessment of the impact of this phase of the project demands an understanding of the schedule that the Applicant has advanced. At the same time, it must be remembered that considerable doubt was expressed to the Inquiry about the Applicant's ability to adhere to its proposed schedule.

The Proposal

Let us now turn to the Alcan Project itself, first in general terms, then, in keeping with our mandate, in terms that are specific to the Yukon. The proposal to carry natural gas by pipeline from Prudhoe Bay to the continental United States is advanced in Canada by a group of companies that includes Foothills Pipe Lines (Yukon), a wholly owned subsidiary of Foothills Pipe Lines, and the two owner companies of Foothills Pipe Lines, Westcoast Transmission and Alberta Gas Trunk Line. Northwest Pipeline Corporation, through its wholly owned subsidiary, Alcan Pipeline, proposes to build the Alaskan segment of the pipeline. The proposed gas pipeline would follow the trans-Alaskan oil pipeline south from Prudhoe Bay to Fairbanks. It would then swing southeast, following generally the Alaska Highway across the Canadian border and through the southern Yukon into northern British Columbia. It would then move across British Columbia, through Alberta, dividing, before reaching the United States, to pass through southeastern British Columbia and southwestern Saskatchewan. From Prudhoe Bay to the 49th parallel, this route covers 2,753.7 miles.

The proposal, as designed, represents the largest mainline transmission system for natural gas on the North American continent. The 48-inch diameter pipe is larger than any other in Canada or the United States. At its designed optimum operating pressure of 1,260 psi, the pipeline would carry 2.4 billion cubic feet of gas per day, an amount that is substantially more than half of Canada's current natural gas consumption per day. With the reserves now proved at Prudhoe Bay, the pipeline can be used at this level of operation for at least 25 years. Further discoveries of gas could prolong its life. Present estimates of the cost of the proposed

The first 20 months of the proposed schedule, from October 1977 to the end of May 1979, are taken up largely with preconstruction activities, which involve neither excessive labour nor large quantities of capital equipment. Detailed planning and designing of the project will be accomplished during this period. These activities include final surveys of the route, the location and preparation of gravel pits, the surveying of access roads, and the clearing and grading of the right-of-way. All of these activities, particularly the planning and design work, take time. Indeed, Mr. Blair, the President of Foothills, said in evidence that he thought this part of the proposed schedule was very optimistic and that any attempt to follow the schedule would introduce excessive costs and inefficiencies owing to incomplete planning. He suggested that it would be appropriate to add twelve months to the preconstruction schedule, so that these activities would run to the end of May 1980 (46-6359-60). The National Energy Board, in its decision on northern pipelines also concluded that the delay in this part of the schedule would likely be at least one year (4-186).

The second part of the proposed schedule focuses on construction of the pipeline, which will have been preceded by a substantial build-up of activity. This is, of course, by far the most intensive part of the schedule, and the part that will cause the major impact. Construction is proposed to run over 22 months. While the application calls for construction to begin in June 1979, the Applicant now says it would prefer to commence later, to accommodate the necessary planning, and that June 1980 would be an acceptable date. This change would make November 1, 1982 the date of first operation of the pipeline.

In addition, Mr. Blair indicated that the Alaskan segment of the project would not be completed in any event until six months after the Yukon segment. Hence, even if construction in the Yukon did not commence before January 1981, the date of first operation could be held at November 1, 1982 (46-6361).

The route through the Yukon will be divided into seven sections, from Section 1 in the northwest to Section 7 in the southeast. For geotechnical reasons, the three northwestern sections will be built during the winter construction season, which runs from January through March. The other four sections will be built during the summer construction season, from the beginning of June to the end of November. In any particular construction season, the Applicant proposes to have in the field two spreads, each consisting of about 800 men and equipment. Each spread will be responsible for one section of the line. For example, the first construction season is proposed in the application for

the summer of 1979. During that season, the company proposes to complete two sections of line, Section 4 in the Haines Junction area and Section 6 in the Teslin area. In the winter season of 1980, the company proposes to complete Section 2 in the Koidern region and Section 3 around Burwash Landing. The summer season of 1980 would see the completion of Section 5, which is centred on Whitehorse, and Section 7 in the Watson Lake area. Finally, Section 1 at the northwestern end of the line would be completed during the winter construction season of 1981.

The intensity of activity during these seasons of pipeline construction reflects the size of the project. Huge ditching machines attack the cleared and graded right-of-way to provide the trench in which the pipe is laid. Lengths of pipe strung beside the ditch are then lined up and welded. The bottom of the ditch must be contoured, and the pipe bent to provide a match between ditch and pipe. The pipe is X-rayed, insulated, wrapped and lowered into the ditch, which is then filled.

The construction phase will obviously be both labour intensive and capital intensive. In fact, although the Applicant's estimates of manpower requirements are relatively limited throughout the preconstruction stages, during the first summer of construction the company estimates that some 2,100 workers will be required, and the proposed requirements for manpower will peak in the second summer with about 2,300 workers. The two winter construction seasons call for about 2,000 and 1,000 workers, respectively.

Even without questioning the Applicant's schedule of construction and its requirements for manpower, it is clear that such an ambitious project will bring many hundreds or even thousands of newcomers to the Yukon. These newcomers or in-migrants will have a considerable impact on the region. We shall return to this subject in Chapter 6.

Other aspects of the construction phase underline the dimensions of the project. For example, more than one-half million tons of diverse materials will be needed, including 371,538 tons of pipe alone. Roughly 407,000 tons of equipment, supplies, and materials (including pipe) will move from Haines, Alaska, along the highway to Haines Junction, and from Skagway, Alaska, along the White Pass & Yukon Railway to Whitehorse. Most of the rest of the tonnage will be moved by truck along the Alaska Highway from British Columbia. The implications for the existing transportation systems in the Yukon are obvious.

Finally, it is worth noting that, although the Yukon segment of the Alcan Project would be a major

construction operation by itself, construction will also be going on simultaneously to complete the segments through Alaska and British Columbia. We shall refer again to these aspects of the subject.

Operations phase

On completion of construction, the lines will be tested and made operational by October 1, 1981, or, as Mr. Blair is now suggesting, by November 1, 1982. From that date, the effects of the pipeline in the Yukon will be of a different character. Perhaps the most graphic measure of this difference will be in the manpower requirements of the operation and maintenance phase (as contrasted with the construction phase). Foothills Pipe Lines (Yukon) proposes to employ about 200 persons in the Yukon during the operating life of the pipeline. Of this number, 22 should be located at each of the four service centres along the proposed route: Beaver Creek, Haines Junction, Teslin, and Watson Lake. In addition, twelve employees living at Watson Lake would be responsible for the pipeline in northern British Columbia. The rest of Foothills' employees would work at the operation's head office in Whitehorse.

This work force will be responsible for the operation and maintenance of 513 miles of pipe and six compressor stations in the Yukon. Each compressor station will initially power the line with gas turbines, but these stations may be constructed so they can later be converted to electricity, should hydroelectric power become available in the Yukon for that purpose. This potential for electrification is of much interest to Yukoners, and it is given more attention elsewhere in this report.

Lastly, we have concluded that any prediction of this project's impact on a site-specific basis must be made with caution. Evidence before us has clearly indicated the likelihood that there will be routing changes on a site-specific basis as particular problems or local concerns are revealed. For this reason alone, it seems unlikely that the exact route described in the application for this project will be followed. Even should the Government of Canada approve the project, the pipeline will, in the nature of things, probably be built along a somewhat different route. This probability is enhanced by the fact that there are several other possible routes across the southern Yukon. The pipeline could be routed from the Alaskan border, through Dawson, then south along the Klondike

Highway to Whitehorse, and into British Columbia along the Alaska Highway. Alternatively, the route could, on leaving Dawson, follow the geological formation known as the Tintina Trench to the border of British Columbia (see Figure 3). These alternatives were not part of the application for this project, nor has Foothills provided the Inquiry with information, such as possible route locations or construction schedules, for them. However, from the beginning, and at the request of participants before us, we decided to hear evidence about these other possibilities. We shall return later to certain conclusions based on this further evidence.

Another route that did not figure in the application for this project is one that might follow the Dempster Highway, from its junction with the Klondike Highway near Dawson, to the Mackenzie Delta. Although the Alcan Project did not include this so-called Dempster lateral in its proposal, here, too, we were requested to receive information about such a possibility, and we decided to do so. We shall return also to the conclusions drawn from that information.

Other Developments

In addition to the project itself and these other possible pipeline routes, many people spoke to us about additional major developments that may come to the Yukon—the paving of the Alaska Highway, mining projects, large-scale hydroelectric projects, an oil pipeline, and so on.

For some there was real concern that a gas pipeline would inevitably bring these activities in its wake, for others there was the strong hope that it would not. The shared assumption here is that the proposed pipeline will trigger such projects. If this assumption is sound, then a proper assessment of the impact of the pipeline project would probably have to take account of these consequential developments and their effects on the Yukon. However, if the linkages are tenuous or non-existent between this project and other development proposals, a more cautious approach, focussing on the project itself, is called for.

To us, the latter course seems more appropriate for the Yukon. It may perhaps be useful to remind ourselves that the Yukon has in the past seen a number of different major developments without experiencing in each case a sustained series of developments as a result. The "boom-and-bust" syndrome is stark evidence of this fact of Yukon history.

In addition, as we shall see in a moment, an examination of the major projects predicted by some does not immediately reveal the way in which they would be rendered any more likely by the building of a pipeline. Hence, for better or worse, the proposed pipeline ought not to be regarded as the guarantor of future large-scale developments in the Yukon.

Moreover, it is desirable to underline that any proposals for such developments will very likely undergo much the same kind of scrutiny as the proposal for a pipeline. In this way a discrete analysis of each proposal is possible—assessing the impacts of each, indeed the acceptability of each—thereby permitting Yukoners an integral part in setting the future course for their territory. Nonetheless, because so much was said of these projects during the hearings, their significance to Yukoners warrants a brief examination of each of them.

Paving the Alaska Highway

The paving of the Haines Road and the Alaska Highway north of Haines Junction is now scheduled to begin in the summer of 1978. This paving project, which has been in the planning process for some time, would run over the next ten years. Its aim is to increase the ease of road access to Alaska. Although this project and the pipeline project are not dependent upon one another, their uncoordinated coincidence would probably cause unnecessarily severe strain on tourist traffic and local employment forces. It is apparent therefore that coordination of the two projects is essential.

Hydroelectric Development

It was frequently said to us that major hydroelectric development lies in the immediate future of the Yukon. No doubt this possibility may be true, if one has regard to the potential offered by the great rivers of the Yukon. There is also no doubt that such development could be a matter of controversy.

However, we were not made aware of any hydroelectric development that is being planned to service the proposed pipeline. Although the Applicant has indicated that its construction plans will permit the use of hydroelectricity to power the line, we have real reservations, expressed later in more detail, about the likelihood of this use coming to pass, even if the power is available. If such development does occur in the future, it simply cannot now be said to be a probable consequence of the pipeline.

Mining Development

We were also told on a number of occasions about the great potential for the development of the untapped mineral resources of the Yukon. In the main, these possibilities appear predicated on the availability of large quantities of hydroelectricity and therefore on large-scale hydroelectric development. This, of course, would be independent of any gas pipeline. Some persons who spoke to us, however, were of the view that such development might be expedited by Foothills' proposal, because natural gas could be used as a cheap source of power. In this connection, however, it must be remembered that Foothills proposes to limit the supply of natural gas in the Yukon to residential and commercial users, industrial use is outside their present plan. Foothills has indicated that, before natural gas would be made available for industrial use, not only the economics of the situation but also the availability of the gas supply would have to be analysed. In these circumstances, it seems difficult to anticipate any substantial mineral development as a result of the proposed pipeline.

An Oil Pipeline

Another possibility cited to us was that, once a gas pipeline was in place, an oil pipeline would be likely to follow it, using the same overland route from Alaska to mid-continent. It may be that, if a decision is taken to build an oil pipeline overland, the same route will be followed. Government policy as enunciated in *Expanded Guidelines for Northern Pipelines* (1972) would clearly encourage this. Nevertheless, it is not easy to see how the decision to build an oil pipeline overland would be encouraged by the pre-existence of the gas pipeline. Indeed, the information given to us suggests that any decision concerning a possible oil pipeline across the Yukon is at least ten years away.

Looping

Looping occurs when it is found necessary to increase the capacity of a pipeline system. It is accomplished by laying a second transmission line beside the first. This addition is made over time, in segments or loops, from one compressor station to the next, until ultimately the entire line is twinned. Foothills readily acknowledges that, if its proposal is approved, the pipeline will probably be looped. At present, however, the timing of

such looping is indefinite, and any impacts of such looping must remain conjectural. Moreover, it must be remembered that, if looping is suggested, a careful review of any such proposal should be available to ensure its desirability and to minimize any of its adverse impacts.

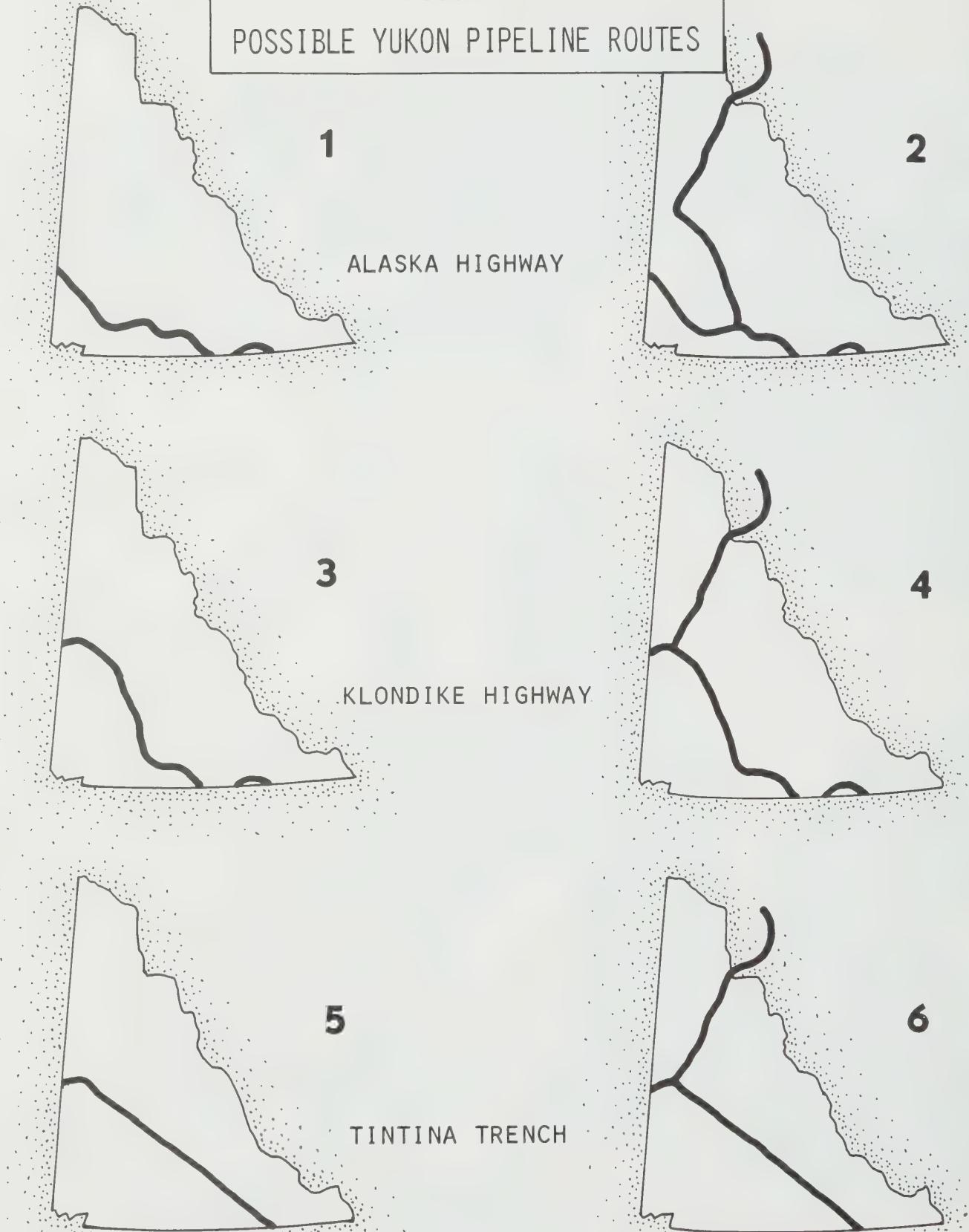
To conclude, the relations between the proposed gas pipeline and any future major developments in the territory are tenuous at best. We must, therefore, return to the point at which we began and focus our attention on the proposal itself and on its meaning for the Yukon and its people.

4 Alternative Routes



Stockpile of pipes

FIGURE 6
POSSIBLE YUKON PIPELINE ROUTES



In this chapter we briefly describe the alternatives to the Alaska Highway route – routes along the Klondike Highway and the Tintina Trench – for a pipeline that would transport Alaskan gas across the Yukon.

The Alaska Highway, the Klondike Highway, and the Tintina Trench routes are shown schematically on the left-hand side of Figure 6 and in more detail in Figure 3. The right-hand side of Figure 6 shows each of the three possible routes with a connection to the Mackenzie Delta–Beaufort Sea region. This connection, known as the Dempster lateral, is discussed separately in Chapter 9.

At present it appears that any one of the six possibilities represented in Figure 6 could be realized. The Alaska Highway route, Map 1 in Figure 6, is the route along which Foothills has proposed to build a pipeline and the subject of this Inquiry. The Klondike highway route, Map 3 of Figure 6, shows the route recommended by the National Energy Board in its report of July 4, 1977. The Tintina Trench route, Map 5 of Figure 6, has not been the subject of an application, but it has been studied previously and it was recommended to this Inquiry by a number of Yukoners.

We suggest in Chapter 9 that a Maple Leaf line, which would move gas from the Mackenzie Delta southwards along the Mackenzie Valley, should remain a possibility for the future. The construction of the Dempster lateral, as shown on Maps 2, 4, and 6 of Figure 6, is not a foregone conclusion, even if one of the three main pipeline possibilities is approved. The selection of a route north to Dawson, along either the Klondike Highway or the Tintina Trench, should not dictate the construction of the Dempster lateral in preference to a pipeline along the Mackenzie Valley.

Each of the three main pipeline routes through the southern Yukon must be examined, and one may be selected. If the Dempster lateral is chosen in preference to a route along the Mackenzie Valley to transport Canadian gas, it could feasibly connect to any one of the three main routes under consideration.

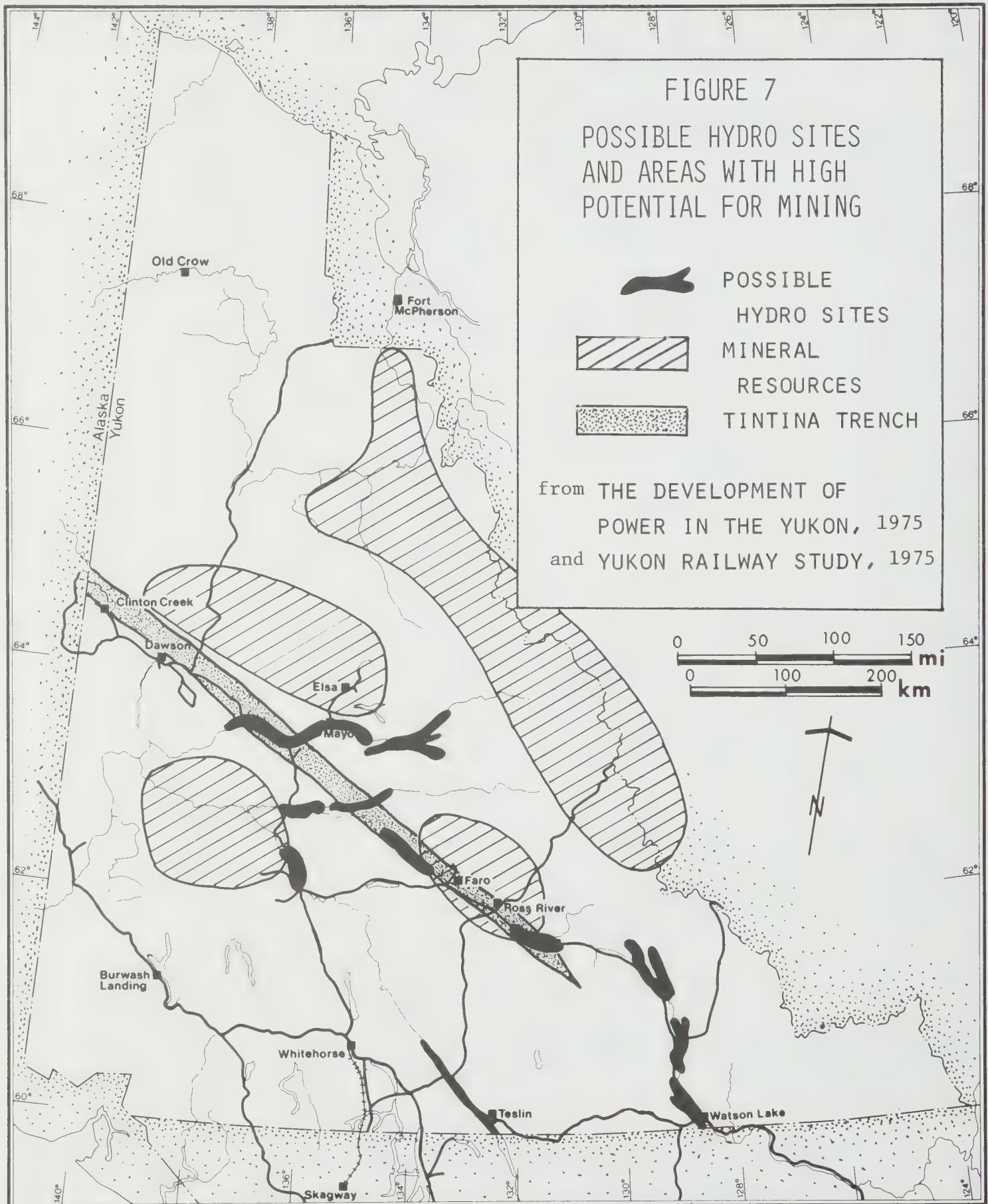
However, there are obvious economic and logistical advantages if there is a road nearby to use during pipeline construction. This is one reason why those who first considered the transport of Alaskan gas across the Yukon considered pipeline routes that are more or less parallel to existing roads. In the Yukon, roads tend to follow the valleys, and a map of proposed pipeline construction would resemble a map of the Yukon's highways (see Figure 3). The idea of transportation corridors, containing highways, one or more pipelines, and possibly other transportation facilities, was in the minds of some Yukoners and of some of the early study groups considering pipelines, even before the corridor concept was given prominence by the federal government's pipeline guidelines, published in 1970 and 1972.

Westcoast Transmission Company Ltd., a co-sponsor of the Foothills project, was formerly a part of a consortium known as Mountain Pacific Pipeline Ltd., one of the first groups to consider a route through the southern Yukon to transport Alaskan gas to the lower United States. In the early 1970s, the Tintina Trench route was known as the McElhanney route, after one of its proponents, McElhanney Surveying and Engineering Ltd., of Vancouver. In 1972, the Government of Yukon endorsed this route in a report submitted to the Government of Canada. At that time, however, the attention of both government and industry was focussed on a gas pipeline route across the northern Yukon and south along the Mackenzie Valley. The federal government, through its Environmental-Social Program, planned to carry out some pipeline-related studies along the Tintina Trench, the Alaska Highway, and the Dempster Highway, but these plans were dropped in May 1972 (MVPI, F123-18866). The federal government's Expanded Guidelines for Northern Pipelines, released in June 1972, specifically suggested selecting a corridor in the northern Yukon, but not in central or southern Yukon, through which the government would be willing to consider an application to build a gas pipeline.

Foothills has not provided this Inquiry with any detailed submissions on possible routes through the Yukon other than the one it proposes to build along the Alaska Highway. Arctic Gas ruled out routes through the southern or central Yukon because the basis of its proposal was to gain economies of scale by the transport of both Alaskan gas and Canadian gas in one pipeline. Both the Alaska Highway and the Tintina Trench routes were considered in a very general way during August 1975, when the Mackenzie Valley Pipeline Inquiry held its hearings in Whitehorse. Those hearings did not bring out any consensus of Yukoners' views on alternative routes.

Pipelines in Established Corridors: Rebirth of an Old Idea

Pipelines do not need to be built near existing roads, as we can see by comparing pipeline routes and highways in northern Alberta and British Columbia.



A number of Yukoners addressed this Inquiry on the subject of alternative routes, and particularly on the Tintina Trench route. We welcomed these submissions.

The Klondike Highway and Tintina Trench Alternatives

Klondike Highway Route

This alternative, described by the National Energy Board as "the Dawson diversion", came into prominence only in the last ten days of this Inquiry's hearings, as a result of the National Energy Board's report, published July 4, 1977.

A route along the Klondike Highway would enter Canada at Boundary, Alaska, and then follow Highway 3 across an upland of the Klondike Plateau to the vicinity of Dawson. From near Stewart Crossing, the route would more or less follow Highway 2 south to Whitehorse. Between Boundary, Alaska, and Watson Lake, a pipeline along the Klondike Highway route would pass near nine Yukon communities – Clinton Creek, Dawson, Stewart Crossing, Pelly Crossing, Carmacks, Whitehorse, Teslin, Upper Liard, and Watson Lake. The Yukon portion of this pipeline would be about 613 miles along, as compared with a length of 513 miles along the Alaska Highway route from the Alaska border to Watson Lake.

The National Energy Board's report suggested that the Klondike Highway route "would bring a major new source of energy at reasonable prices to the mining activities in the vicinity of the Klondike Highway" (1-168). This comment presumably refers to the mineral resources of the Dawson Range west of Carmacks. The Yukon's main areas of mineral resources are shown in Figure 7. One of these areas, the Dawson Range, is near the Klondike Highway; two others lie north of the Tintina Trench; and the major area, the Selwyn Mountains lead-zinc belt, lies along the border between the Yukon and the Northwest Territories. The areas that seem most promising for the development of new producing mines during the next decade are not along the Klondike Highway but in the Faro district and in the Macmillan Pass area on the Yukon-Northwest Territories boundary. The Klondike Highway route would pass near the sites of three potential hydroelectric developments, which are discussed in The Development of Power in the Yukon (1975). These sites are the Independence site on the Stewart River,

the Bradens Canyon site near Pelly Crossing on the Pelly River, and the Low Five Fingers site near Carmacks on the Yukon River (See Figure 7).

Throughout our hearings in the Yukon communities, no one expressed a preference for the Klondike Highway route.

Tintina Trench Route

The Tintina Trench is a straight valley 3 to 14 miles wide, which extends for about 380 miles in the Yukon from the Pelly Mountains to the Alaska-Yukon border. This conspicuous northwest-southeast fault line is generally considered to be a northern continuation of the Rocky Mountain Trench.

From Boundary, Alaska, to Stewart Crossing, the Tintina Trench route would follow the same route, past Dawson, described above for the Klondike Highway route. From Stewart Crossing to Faro the Tintina Trench route would cross a 120-mile-wide area without a road. This area could be avoided by a route from Stewart Crossing to Faro by way of Carmacks. Southeast of Ross River, the Tintina Trench ends in the Hoole River watershed of the St. Cyr Range. This area is also roadless, but it, too, could be avoided by a divergence eastward to follow the Robert Campbell Highway between Ross River and Watson Lake.

A pipeline route that stayed in the Tintina Trench would run about 515 miles from Boundary, Alaska, to Watson Lake, about the same mileage as the Yukon portion of an Alaska Highway route. If the Tintina Trench route were to follow existing roads for its entire length, it would require about 584 miles of right-of-way through the Yukon.

Most of the economically feasible ore reserves known at present in the Yukon are near the Tintina Trench in the Anvil district or in the Selwyn lead-zinc belt near the Yukon-Northwest Territories border (see Figure 7). The hydroelectric sites with the highest potential for development in the southern Yukon are also shown in Figure 7. Five of these sites are along the Tintina Trench.

It was suggested to this Inquiry that proper planning for future development should consider an industrial corridor along the Tintina Trench. This concept was clearly stated by Mr. H. Tracey at Carmacks:

In this regard, I and many others question the validity of putting the pipeline down the Alaska Highway. Would it

not be much better for future development and future protection of our environment, to put a transportation corridor for road, railroad, transmission lines and pipelines up the Tintina Trench, which would put it through the heart of the future development areas in the Yukon. These consisting of mines, possible smelter and power generation.

This corridor through the territory would then be used as the main artery to which outlying developments would be found. Would this not be much better than a system of roads, pipelines, et cetera added on in an ad hoc fashion . . . ? (28-3275-76).

A submission from the Yukon Chamber of Mines urged the Inquiry to take into account not only the proposed route of a gas pipeline but also the effects that a major hydroelectric development would have on the Yukon's mining industry in the future and the population distribution that would accompany such development. The Chamber of Mines indicated that this development would be largely in or northeast of the Tintina Trench (48-6744-47, 6751). The potential mines are Mactung (1,000 tons/day), Tom (3,000 tons/day), and Jason (5,000 tons/day) in the Macmillan Pass area; Howard Pass (10,000 tons/day), about 50 miles southeast of Macmillan Pass; and Grum (5,000 tons/day) near Faro.

It is not surprising that new railway routes were mentioned during our hearings (20-2605). Rail connections to the mineral-rich areas around the Faro, Ross River and Macmillan Pass areas were suggested.

A Decision for Yukoners

Careful consideration must be given to route selection, if the best interests of the Yukon and of Canada are to be served. No route, other than the Alaska Highway route, has so far received any detailed study. Until July 4, 1977, no one in the Yukon had any reason to think that Foothills or any one else was considering any other route, although Yukoners, throughout the Inquiry, have told us that there are several possible routes. At this early stage, each route appears to have some claim to serious consideration, but before a route may be selected, two significant shortcomings must be satisfied.

First, an adequate data base does not exist on which to make an informed choice among the possible routes. For example, Mr. Blair, President of Foothills, testified that the information about the Klondike route that is available from his company consists of only one engineering feasibility study (46-6444). To choose a

Klondike Highway route or, indeed, any route at all at this stage would be premature.

Second, there has been no process of informed public consultation on this subject in the Yukon. Local consultation and local input is an accepted, indeed, a vital part of the decision-making process. At our hearings, Yukoners' attention was primarily focussed on the Alaska Highway route, the route the Inquiry was directed to consider. Their attention was not, therefore, specially directed to a route along the Klondike Highway or along the Tintina Trench.

Yukon residents are no less interested in participating in the decisions that will affect their future than are Canadians of any other region. The high degree of participation of individual Yukoners, organizations, and the government of Yukon in this Inquiry was, by itself, ample evidence of their interest. It is evident to us that Yukoners want the opportunity to play a major role in deciding what may be the best route for a gas pipeline, and they know that the decision will influence the whole future development of the Yukon.

Although there has been much discussion of the corridor concept since the release in 1972 of the federal government's *Expanded Guidelines for Northern Pipelines*, there has been little opportunity to apply the concept in regions where it is likely that a number of different developments may go forward more or less simultaneously, as it appears may be the case in the Yukon.

In summary, to choose now a particular route through the southern Yukon would be to run the risk of selecting the wrong route, a route that is unstudied and that has not been the subject of public discussion, and a route that may prove to be less desirable on social and economic grounds than one of the other possibilities.

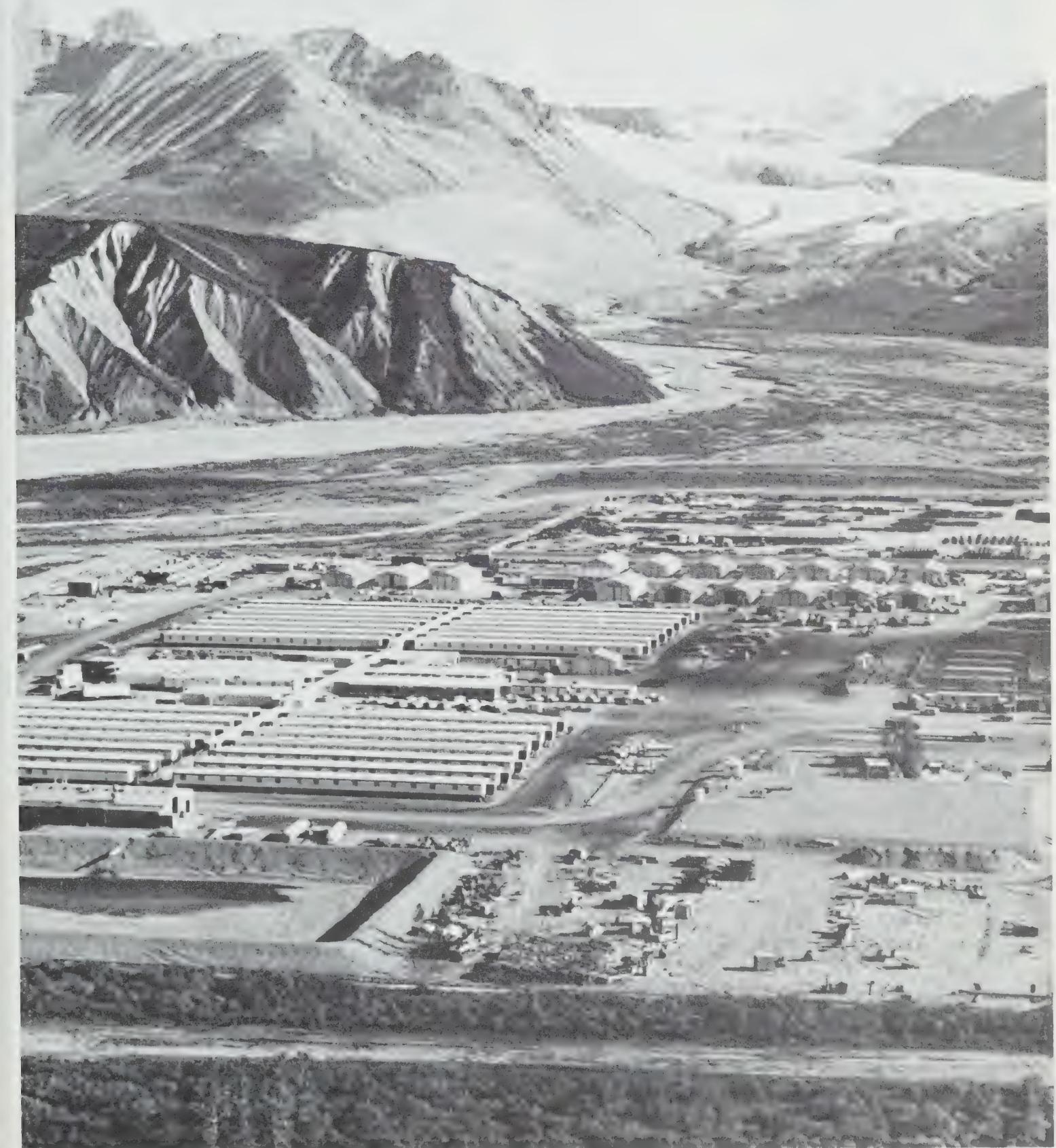
Recommendations

1. If the Government of Canada decides to approve, in principle, a pipeline route across the southern Yukon, it is recommended that approval be given to an undefined route within a broad zone bounded on the south by the Alaska Highway and in the north by the Tintina Trench.
2. The Applicant should be required to provide sufficient information on the Klondike Highway route and the Tintina Trench route to permit an informed

choice from among the three routes. This information should be provided to the regulatory agency described in Chapter 10 of this report.

3. We recommend that the regulatory agency inquire into and report on the relative merits of the three possible routes, having regard to social, economic, and environmental considerations, and that its inquiry include public hearings on this subject.

5 Employment and Training



Work camp on trans-Alaska pipeline route, 1975 (Alyeska)

Craftsmen at freighter canoe building shop in Teslin (Sugamoto)

Winter construction camp for Alaska Highway workers, 1942

(Whitehorse Star)

Canol pipeline workers pose for group photograph in the 1940s
(Public Archives of Canada)

Many pipeline jobs require highly skilled workers (Alyeska)



A common theme running through all major resource proposals for northern Canada is whether or not the projects will provide work for local residents. The pipeline proposal has raised the same concern. The construction of the pipeline will provide many temporary jobs, but not so many permanent jobs. The Applicant, the Yukon government, and the citizens of the Yukon see the prospect of employment as an important benefit that must accrue to Yukoners themselves. In this chapter, we discuss the benefits of training and employment that may be derived from the two phases of the project: the construction phase, which will follow the federal government's approval-in-principle of the pipeline, and the operation and maintenance phase, which will begin when the pipeline is in place and starts to carry natural gas.

Construction Phase

Labour: Demand and Supply

In its application, Foothills proposed to begin construction of the pipeline in 1979, but, during the course of our hearings, indicated that construction of the pipeline was unlikely to begin before 1980 (46-6358). There would then be a work force of approximately 2,000 through that summer and during winter 1980-81, and it would reach a peak of 2,300 workers during summer 1981. These estimates represent the Foothills work force and the contractor personnel engaged in project management and inspection, compressor station site preparation and access road construction, transportation of granular material, compressor station construction, pipeline construction, and logistics. These estimates do not include employment that will be generated as a result of secondary pipeline construction activities.

Foothills has categorized pipeline employees into approximately 85 distinct occupational groupings, and they in turn are organized into four skill classifications:

- Class 1. Skilled work, with experience or qualifications acquired through extended employment in pipeline construction
- Class 2. Skilled construction-oriented labour, not necessarily related specifically to pipeline construction
- Class 3. Clerical work or the handling of light equipment
- Class 4. Unskilled or inexperienced labour

The Applicant did not provide either a description of the distribution of personnel requirements by skill classification, which would indicate how the proportions of these classes might change through the term of the project, or a detailed breakdown of the work force.

During the peak construction period, an estimated 35 per cent of the jobs would fall within Class 1, a class that in the Applicant's opinion, would not include any Yukoners. The requirements for these positions are said to be beyond the qualifications of anyone that has not had previous pipeline experience. Yukoners are, however, potentially capable of filling any of the remaining 1,500 jobs.

Based on an examination of the unemployment rolls in Whitehorse in September 1976, the Applicant estimated that some 600 unemployed Yukoners possessed skills that could be used in pipeline construction. Foothills assumes that few Yukoners would transfer from their current employment to take short-term jobs in pipeline construction.

Many witnesses before the Inquiry suggested substantially larger figures for the construction work force. Construction of the Alyeska oil pipeline through Alaska saw a three-fold increase beyond that estimated at the outset in its personnel requirements. Estimates for the portion of the proposed pipeline to be built in Alaska, based on the number of workmen per pipeline mile, are substantially greater than those put forward by the Applicant for the section passing through the Yukon. The final route selected and pressures caused by delays in the construction schedule may also cause a significant increase in the numbers of the work force.

We therefore believe that the labour requirements of the project, although difficult to determine accurately at this stage, will be greater than the Applicant's estimate. Similarly, we suspect the number of Yukon residents who will be drawn away from their current employment to work on the pipeline may be substantially underestimated. In Alaska, many local residents were lured from their current employment by the attraction of higher, if short-term, wages on pipeline construction.

The lack of employment opportunities in the Yukon was the subject of recurring complaint at the hearings in many of the communities. Some Indian people mentioned the jobs that they hoped the project would bring, such as clearing the right-of-way, but many more feared that most of the jobs would not be available to Yukon residents, White or Indian, because they lack the necessary skills. It is apparent to us that, given a

system of local preference and some training to qualify for employment on pipeline construction, many Yukoners are interested in such employment, and some are eager to secure it.

Hiring and Employment Policy

Foothills proposed to use a hiring policy that guarantees preferential employment for Yukoners in all aspects of the project. Preference will be given to a Yukoner when his qualifications are equal to those of a non-Yukoner. The Applicant has also agreed that all union hiring-halls will be located in the south – in Alberta and British Columbia – and that they will not permit outsiders to gain access to the project from within the Yukon. This policy should reduce the number of persons coming to the Yukon hoping to find high-wage employment.

Such a policy will require the definition of a Yukoner. The Applicant does not propose to define the term, but it will accept and enforce whatever definition is eventually provided.

Foothills has also agreed to cooperate in the design and implementation of a Manpower Delivery Service (hereafter called the Service) to ensure that all interested Yukoners may obtain work on the pipeline.

Briefly, we agree with this approach. We see the Service as a special employment agency that will match all Yukoners interested and qualified for pipeline employment and training with employment and training positions. The Service will involve the compilation of an inventory of the potential Yukon labour force according to training, experience, and skills so that experienced workers may be directed to areas where jobs are located and their skills are needed.

Mr. John Burrell, Vice-President of Corporate Development for Foothills testified:

We believe that an efficient manpower delivery system must be in place if employment of Yukon workers on the project is to be optimized.

- (a) In order to avoid unnecessary duplication and competition for the local worker, the system should be designed to deliver Yukon manpower to the total project, i.e., pipeline and related activities.
- (b) The system should, as much as possible, direct persons into the vocation for which they are best suited. The system should prepare the people for the working conditions which they will encounter.
- (c) As much of the delivery system's functions as practical should be carried out in the communities,

thus allowing Yukoners to remain in their home communities as long as possible.

- (d) The system should utilize services available from existing sources as much as possible. Since government departments are already providing services similar to those described, and in fact have offices located in a number of Yukon communities, it is Foothills' opinion that it would be appropriate for government to continue to provide such services. Foothills will co-operate with the appropriate government agencies, contractors, unions, and local organizations toward the development of such a manpower delivery system (2-208-09).

The same basic principles – union hiring-halls in southern Canada, preferential hiring of Yukon residents, a single-agency Manpower Delivery Service, and a policy that prohibits outsiders from applying in the Yukon for pipeline employment – have been recommended by the Government of Yukon, and the pipeline unions have found them to be generally acceptable.

The Government of Yukon has recommended a preferential system for pipeline employment with three levels of priority. First preference goes to a "Permanent Yukon Resident", defined as a person who has been ordinarily resident in the Yukon for five years prior to accreditation. The second level of preference is a "Yukon Resident", a person who was resident in the Yukon on or before July 15, 1977. The third category is that of "Qualified Residents of the Northwest Territories". All workers in these three categories will be preferred to residents of southern Canada.

No representative of the Canadian Pipeline Advisory Council, a policy council that represents contractors and the four principal pipeline unions – United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada; Labourers International Union of North America; International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers of North America; and International Union of Operating Engineers – was able to attend the Inquiry at Whitehorse. However, Mr. Gordon Hodson, Secretary-Treasurer of the Canadian Pipeline Advisory Council, wrote a letter to the Board that reaffirmed the policy position his council had taken before the Berger Inquiry in September 1976. It is apparent from this correspondence that the unions want to assist Yukoners to obtain training for and employment on the pipeline project. They also understand why it is necessary to protect the Yukon from a massive invasion of southern Canadians in search of jobs on the pipeline.

Union representatives who testified before the Berger Inquiry agreed that a hiring policy should be adopted that would require all southern Canadians who had travelled to the Yukon in search of work on the pipeline to return to the hiring-halls in Alberta or British Columbia to seek employment. All of the witnesses before our Inquiry who spoke on this subject expected that this policy would substantially reduce the number of unemployed workers who would travel north with merely the hope of finding a job.

We presume that the unions will continue to recognize the importance of this policy and will implement it, even though, unlike the situation in the Northwest Territories, the four major pipeline unions have hiring-halls in the Yukon.

Although the pipeline unions accept the principle of hiring local labour, the union representatives insist that the practice must not jeopardize the safety of other workers. They insist that persons with no experience in pipeline construction should be integrated into experienced crews to avoid potentially dangerous situations. The element of safety, as measured by experience in pipeline construction will be, in the unions' view, a factor that may restrict access to pipeline employment by otherwise qualified Yukoners. Moreover, the unions have rejected any suggestion that a quota or a percentage of the work force should be made up of Yukoners.

The Canadian Pipeline Advisory Council has recommended that, to avoid involvement with a multiplicity of government agencies, a single agency – such as the Manpower Delivery Service – should be established to operate the preferential employment system in the Yukon. The Service should include representatives from the Applicant, the contractors, the unions, and the Indian groups.

Any preferential system requires an assessment of the skills of the candidates to be preferred. The unions made it clear that they must be centrally involved in the assessment of the skills of all Yukoners who apply for employment on the pipeline.

The Canadian Pipeline Advisory Council and the unions are willing to participate in an information program that would familiarize the residents of northern communities with the skill requirements of personnel working on the pipeline. In southern Canada, pipeline workers usually go directly from their homes to a construction camp. The unions carry out their normal job-dispatch function by telephone or telegram, thereby introducing flexibility to a system that once required all union members to travel to a hiring-hall for dispatch to a job. The unions have suggested that this same system be used

elsewhere in the north, with this refinement: non-members may obtain membership in the union on arrival at the construction camp. Mr. J. Russ St. Eloi, Vice-President and Director of Canadian Affairs for the United Association (Welders and Pipefitters), has said that efficient communications, such as a telex system, would be required to assure prompt dispatch of workers from northern communities. Appropriate arrangements can also be made at the construction camp to deduct fees for initiation into the union from the new member's pay. These policies will be important in enabling Yukoners to secure unencumbered access to pipeline employment.

The Applicant has proposed to make an arrangement whereby:

... certain members of the community, depending on how they wanted it set up, could come on and work on the job, and then after a certain length of time, could go back to their own community, and another group could come on, so that we could maintain continuity within the community and still give the people an opportunity to have construction employment if they so desire it (8-1290).

This plan will be important for two reasons: it will ensure that Yukoners who live in a mixed economy have time enough to carry out their land-based activities, and it will permit community leaders to participate in construction employment without depriving, except for short periods of time, their communities of necessary leadership. We are not yet fully aware of the unions' attitude to such a scheme, but we do know that they are not willing to consider different rules of conduct on the job, or different disciplinary measures, for a particular class of employees. However, the unions may regard the situation in the Yukon as special. Mr. Irvin Nessel, International Representation of the International Union of the Operating Engineers, when asked about flexible schedules that would enable the Indian people to pursue other activities, said that, "It wouldn't bother me from a union point of view because they [the contractors] would just be on the phone and saying 'Hey, we need some ore hands out here'" (MVPI, F180-28032).

Mr. Lawrence LeClair, President of the Alberta and Northwest Territories Building and Construction Trade Council, has also said that:

... we don't object to his type of procedure, where the northerners who may be working and in the fall, if they want to go trapping or hunting, I don't see anything wrong with allowing them to take off for two or three weeks, or as long as they figure they have to, and then

coming back and having the same job back again (MVPI, F181-28068-69).

The pipeline unions are, however, concerned that such flexible arrangements might reduce the efficiency of the pipeline work crews, a matter they regard as important because of productivity bonuses that are built into collective agreements.

Training policy

The Applicant has made only very general comments about the training of Yukon residents in new skills for the construction phase of the pipeline.

The mechanism for providing pre-construction and construction training should be developed and made known to the public. While Foothills will co-operate fully in this, Canada Manpower, contractors and unions have traditionally provided this training and Foothills believes this practice should continue (2-209).

As far as construction is concerned. Normally the contractor and the unions have set up training programs . . . We've had discussions with the unions and with the contractors and they fully intend to continue with training of people to take the construction opportunities that are available on the pipeline (11-1782).

They [unions and contractors] have indicated to us that they have some special arrangements made to enable the northern residents to have an opportunity to obtain such training (11-1850).

... the training that should be provided to Yukoners is the training that they can use on a continuous basis in the North, such as operating of graders and cats . . . those occupations . . . that could exist in the North (11-1783).

The Applicant has not assumed any direct responsibility for such training, nor does it intend to implement pre-job or on-the-job training programs during the construction phase. This attitude is a reflection of the Applicant's estimate of the composition of the work force, for, as previously explained, it has calculated that only about 600 Yukon residents will be taking pipeline construction jobs.

Although many unskilled jobs may be made available to Yukoners, and many skilled jobs may be available to qualified Yukoners who have not had previous pipeline experience, we feel the Applicant has unduly minimized the basic concern that many Yukoners, and especially Indians, have expressed to us.

Throughout the community hearings, local people, especially the Yukon Indians, expressed doubt that they have skills sufficient to work on pipeline

construction. Some feared that they would not have adequate time for training that would enable them to qualify for skilled labour. Many of the local people declared they want the high-paying jobs that will be offered, even though such employment will last only a few seasons.

... the Territorial Government and Foothills (Canada) Limited should get together and run a training program in the Yukon Territory for native people to be able to get better jobs on the pipeline, rather than getting jobs such as slashing, et cetera, which . . . very cheaply standardizes the wages. If they have a training program and they have a few years, they can go on it and enable the native people to run maybe loaders, ditching machines, and stuff like that. Quite a few Indian people as I know are capable of this, if they had a year or two, or even time to understand the principles of the machinery (27-3199-3200).

We do not know how many Yukon Natives are qualified to build a pipeline. If we have five years to be able to train these people and get them into vocational schools for basic training, in five years they'll at least have journeyman papers, so some can go to work (18-2368).

The Applicant seems to have underestimated the useful role that the pipeline construction could serve to enable many Yukoners to acquire valuable skills. Professor Charles Hobart, testifying before the Berger Inquiry, stated that the only lasting benefit of the pipeline construction to the Indian people would be the acquisition of useful skills during the construction phase. With that statement we agree.

Emphasis must be placed on training in useful skills. Representatives of the four pipeline unions, together with Mr. James McCambly, Executive Secretary of the Advisory Board for the Building Trades in Canada, which represents the building-trade unions in Canada, acknowledged the importance of a variety of institutional pre-job training and on-the-job training programs, and have agreed to play an active role in the development and operation of such programs. To ensure that the programs are useful, he said that "emphasis should be placed on training northern Canadians in skills that will be required on a relatively continuous basis" (MVPI, F181-28046). Administrative and clerical skills, for example, will always be in demand, and many other skills associated with pipeline construction, such as the building of compressor stations, metering stations, accommodation and food facilities, and other temporary or permanent facilities, would be developed. These skills might then be transferred to other activities present in the Yukon economy today or in the near future.

Much work needs to be done quickly. Training in skills that will be useful on pipeline and later construction

and institutional and on-the-job training programs must be commenced months or years before the start of pipeline construction. Mr. Nessel testified that:

"the pre-training programs we foresee would go maybe six or eight months or a year before the work starts. From there on the training programs might continue but they . . . would filter into the on-the-job training situation much quicker . . ." (MVPI F180-27939-40).

Other training programs could begin shortly before the commencement of construction. For instance, we were told of a five-week, pre-employment training course that began at Fort McMurray in 1974. It not only provided training in useful skills, but also instilled trainees with new confidence in their own abilities. Such confidence often substantially improves a person's work and increases the length of time he remains on the job.

In summary, we are not able to determine exactly how many Yukoners may wish to undertake training for work on pipeline construction, but we know that many local people, especially Yukon Indians, want training opportunities to be made available to them in sufficient time for them to qualify for the high-paying jobs associated with pipeline construction.

The unions wish to participate in the development and operation of these training programs, for they have the expertise that, in the end, is fundamental to any successful training process. The government may be able to provide some organizational or other assistance if these programs are to be implemented, for the unions do not have the resources to provide materials, equipment, salaries, allowances, facilities, transportation, housing, and food necessary for any institutional training course.

There are also certain areas in which the unions may not be involved. For instance, administrative and clerical positions, and associated training for them do not fall within the traditional jurisdiction of pipeline construction unions. This gap would probably have to be filled without union help.

When Mr. William Deyell, speaking for Foothills at another Inquiry, was asked if he thought the Applicant would be willing to participate in financing such training programs, both in providing personnel to assist in teaching them and in providing the equipment necessary for them, he replied, "Yes I would. This has been done in Alberta in the past and I see no reason why it can't be done here as well. It is still done in Alberta when the need arises for it" (MVPI, F171-26534). The Applicant did not make a similar commitment on the subject of training programs to this Inquiry.

Recommendations

General Recommendations

We assume that a relation exists between the availability of employment opportunities and their benefits, and a person's standard of living. We believe some program must be established to enable and effectively assist Yukoners to participate in the construction of the pipeline. Yukoners must be assured that they will have an opportunity to prepare themselves for such employment. The acquisition of useful skills during the construction phase may be the only lasting benefit of the pipeline for many Yukon residents, and especially for Indians, who, because of geographical, historical, and cultural reasons, are at a disadvantage when competing for skilled employment in the wage economy of the Yukon.

Yukon residents should be left to make their own choices with respect to training for, and employment on, the pipeline, but, if their choices are to be free and beneficial, they need access to sufficient information to make an informed decision. To achieve this goal, we recognize, with the Applicant, the Government of Yukon, the pipeline unions, and others, that some arrangement must be devised that will enable Yukon residents to go directly from their homes to training for or employment on pipeline construction. All interested parties have agreed that the various aspects of this task should be directed, supervised, and monitored by a Manpower Delivery Service. Although we do not wish to dictate what will be the specific policies of the Service, we feel that we should, in a general way, spell out the principles and objectives that should be basic to its mandate.

The Service should be independent of and function apart from existing government employment agencies. To be effective, the Service should encompass all pipeline and related construction work, including the activities of subcontractors, that are carried out in the Yukon.

We have mentioned the Applicant's figure of a possible 1,500 jobs available to Yukon residents during the peak period of construction. Because it is impossible to estimate accurately the number of Yukoners who may be attracted to high-wage employment for a relatively short time on the pipeline, the size of the task that the Service will have to perform is also impossible to predict. But, whatever the scope of the task, the Service must have the active cooperation of all interested parties, including the federal and Yukon governments, the Applicant and its contractors and subcontractors, the unions, and the Indian organizations. The Service should have a

policy-making board, composed of a representative from each group, with majority Yukon representation, and it should be convened at the earliest possible moment to establish the particular policies of the Service so that it may begin operations.

The Service should be subject to the authority of the planning and control agency recommended in Chapter 10 (hereinafter called the Agency) and to the general integrity of the Agency's policies. Policies set by the board of the Service should be subject to review by the Agency. The Service and its board should preserve its own independence to ensure that its day-to-day operations are effectively and efficiently carried out.

The Service's central role will be to assist Yukoners to find training and employment opportunities, and to match Yukon workers with employment on the pipeline on a preferred basis. It will ensure that Yukon residents, its clients, are processed through the unions' dispatch systems and are transported by the Applicant, or by its contractors or subcontractors, directly from their communities to the place of work.

The Service's second important role will be to approve, supervise, and monitor the various programs initiated by the Applicant to carry out specific training and employment policies spelled out in our recommendations and set by the Service's policy board. The Applicant will be ultimately responsible for the funding and operating of these programs, although it may propose that various other agencies or organizations carry them out. For example, such matters as transportation of employees and trainees, training courses, skill assessment, on-the-job training, and job counselling might best be carried out by government agencies, Indian organizations, the unions, the Applicant and its contractors, or private contractors, either singly or in various combinations.

The Service should work with the Applicant in preparing detailed training programs, but the Applicant may contract out the execution of these programs to other agencies or organizations. The Service itself should be free to undertake and operate directly, or by contract, any program that cannot be left to the Applicant or cannot be subcontracted by it. In such cases, the costs of the programs should still be charged to the Applicant.

We suggested above that an invasion of the Yukon by southern Canadians in search of high wages must be discouraged. Before a person who is physically present in the Yukon may gain union membership and be listed on dispatch rosters, or engaged for pipeline employment or a training position, he must be registered with the Service as a Yukon resident. In this

way the in-migration of larger numbers of transient workers seeking employment on the pipeline should be effectively curtailed.

The definition of a Yukoner for this purpose must not only discourage transient workers from travelling to the Yukon, it must also be effective in preferring Yukon residents for pipeline employment. The definition must also identify persons who warrant special training programs because of their disadvantages in competing with other Canadians for pipeline employment. We therefore suggest two definitions that we feel will reflect these objectives:

- (1) For the purpose of pipeline employment, preference will be given to "Yukon Residents," defined here as those persons who were resident in the Yukon on or before August 1, 1977.
- (2) For the purpose of eligibility for training programs, preference will be given to "Permanent Yukon Residents", defined here as persons who have been ordinarily resident in the Yukon for five years prior to August 1, 1977.

We think that this definition of Permanent Yukon Residents will identify those persons who for reasons of culture, history, and geography are not at present able to qualify for many of the jobs that will be offered during pipeline construction. These persons will constitute the clientele for pre-job training or on-the-job training programs and, together with Yukon Residents, will qualify for preferred employment. The policy board of the Service should be free to adopt other definitions, if it seems necessary to do so to carry out the objectives we recommend.

We have described the two principal roles to be performed by the Service, we have suggested a definition of its clientele, and we have outlined its basic objectives. We now advance several additional recommendations, including some that will be the specific obligations of the Applicant, recognizing that the policy board of the Service should have the power to moderate or to alter these recommendations, if necessary. We think it is important to make these additional recommendations to assist the rapid development of specific policies and programs, many of which should be implemented as soon as possible after the pipeline project is approved.

We have assigned to the Applicant the primary responsibility for various programs to achieve the objectives we have identified, and we have suggested that the Applicant may discharge these obligations, directly or, where appropriate, through arrangements with contractors, unions, Indian organizations, and government or other agencies, with the approval and

under the direction and supervision of the Service. We hope, by this means, to avoid the creation of a large bureaucracy but, at the same time, to centralize the management, direction, and supervision of these various functions. We also think that the proposed Service should function only during the pipeline's construction phase: on-going functions should thereafter be transferred to the normal government agencies.

Specific Recommendations

1. The Applicant should submit, at the earliest possible stage, a detailed breakdown of the entire work force of the project by job position. This information should include the projected starting date of the job and its duration, details of the skills required, and its location. We think that this and similar information will prove to be of critical importance to the planning and operation of the Service, because early identification of specific employment requirements is vital to planning and instituting training programs, delivering Permanent Yukon Residents to these programs, and matching Yukoners with employment positions.

We emphasize that one of the primary functions of the Service will be to match clients with employment positions. The identification of these positions must occur at an early stage to permit the Service to work efficiently.

We have earlier suggested that Foothills may have underestimated its manpower requirements for the construction phase. Foothills should, therefore, be required to provide plans for its labour requirements for a variety of possible construction schedules. As the work goes forward, the Applicant must closely coordinate its activities with the Service, keeping it abreast of any changes in plans or of new developments.

2. A program should be instituted immediately to inform Yukon communities of the opportunities for training and employment on the project. This program should continue throughout the construction period, and it should be coupled with a broad orientation program that would prepare Yukoners for employment on the project and inform them about such matters as union membership and life in a construction camp.

3. A comprehensive advertising and information program should be instituted as soon as the Service is created to discourage southern Canadians and Americans from travelling to the Yukon without having already secured employment there. This campaign should continue throughout the construction phase of the pipeline.

4. Permanent Yukon Residents and Yukon Residents must be registered locally and cleared with the Service for referral to employment and training positions. Registration and clearance should be coupled with, or closely followed by, an assessment of the worker's experience or skill to identify those persons already qualified for employment, and the Permanent Yukon Residents that need pre-job or on-the-job training. All inquiries and applications for pipeline employment in the Yukon must be referred to the Service.

5. Institutional training programs should be conducted prior to, and during, the construction phase to enable Permanent Yukon Residents to gain skills that they can use during pipeline construction. These programs should concentrate on providing skills that may be of use to the worker after the pipeline is finished.

We suggest that the Applicant, its contractors, and the unions should submit joint plans of procedure to the Service for approval. On the basis of these plans, suitable programs can be organized for all Permanent Yukon Residents who need pre-job institutional training. The Service should, of course, assist in developing these plans. The Applicant and its contractors, together with the unions, should work with the Service to develop plans and procedures for on-the-job training and apprenticeship programs. All of these programs will have to be closely monitored to ensure that the persons in them are trained as quickly and as well as possible, and that they join the labour force as soon as practicable.

6. There must be adequate job counselling on the work sites to assist Yukon Residents and especially Permanent Yukon Residents with any problems that may arise. This role proved to be important in the Alyeska project, in the Nortran Program, and at Fort McMurray. The Service can determine which agency or organization is best suited to develop and carry out this program, always bearing in mind that the Applicant has primary responsibility for its success.

The implementation of this recommendation will require a close liaison with the unions' representatives responsible for protecting the interests of their members, and we do not think this recommendation will detract from their important role. The counselling program we foresee will assist those persons who are unfamiliar with regular wage employment and with the range of problems that are associated with such employment.

Foothills has indicated it intends to provide only a very restricted orientation program, which will include:

- (a) An explanation of camp rules and regulations including those respecting equipment, building and vehicles,
- (b) Explanation of permit stipulations and other applicable codes and regulations,
- (c) Safety practices and working conditions. The program will be tailored to suit the various segments of the work force (2-210).

We should not expect anything less than this bare minimum, but we think the Applicant's program must be supplemented and expanded, for example, by the counselling program we recommend.

7. An efficient communication system must be established that will connect the Service's offices, which will be located in the Yukon, with the Yukon communities, the offices of the Applicant, the offices of the contractors and subcontractors, the union hiring-halls, and the construction camps. This communication system must be reliable, and in place, before construction begins to ensure the prompt delivery of Yukoners to employment and training positions as soon as they are available.

8. The preference system must require the Applicant, and all its contractors and subcontractors, to submit every job and on-the-job training position, including all administrative, clerical, and logistics positions in the Yukon, to the Service. Only by this means will the Service be able to fill the maximum number of positions with Yukon residents before these jobs are made available to non-Yukoners.

The Service must work closely with the unions to ensure that qualified Yukon Residents are dispatched to employment and training positions on a preferential basis. The Service must also be able to ensure that Yukon Residents have preference over non-Yukoners when the work force is reduced.

Our view of the operation of a preference system is somewhat different from that suggested by Foothills, whereby a Yukon Resident would be preferred to a non-Yukon resident when employment qualifications are *equal*: the Service would match Yukon Residents to job positions on a preferred basis, and this preference would occur as soon as a Yukon Resident is found who has the skill or qualifications required for the job. The Service can effect this matching because, by this stage, both the worker's qualifications, and the requirements, of the job will have been determined. This arrangement should prove acceptable to the unions because they will have already played the major role in assessing the skills and qualifications of all Yukon residents.

The Service, the Applicant, the contractors, and the unions must work together closely to ensure that local labour-pool arrangements are implemented, when requested by local residents and where feasible, to permit the rotation of local people in pipeline employment so that they can pursue their own personal, traditional, and community activities.

9. Foothills will be responsible for ensuring that all contractors and subcontractors keep adequate employment records so that the Service can monitor the work force of the project. The Service will require regular submissions of data on employment and must be permitted access to the records of the contractors and subcontractors to assess regularly the effectiveness of its operations and policies and, when necessary, to make adjustments.

10. An orientation program, approved by the Service, should be offered to all of the contractors' and subcontractors' supervisory personnel to explain the purpose and operations of the Service and of its job-site training and counselling programs. This orientation program should also describe the cultural perspective of native Yukoners.

Costs

The Applicant should bear the operating costs of the Service and carry out its various training and employment programs, including those we have recommended. The existing training and counselling programs of some of the unions, and of government agencies, may fulfill some necessary objectives, and to this extent they may reduce somewhat the responsibility and financial burden on the Applicant. However, most of the programs we envisage here will be new, or they will require a substantial expansion of existing programs. The unions may provide some personnel to assist in training, and the government may provide some facilities, where they are available, but in general the operating funds and equipment will come either directly or indirectly from the Applicant.

Because we have made the Applicant directly responsible for most of the training programs, and because the Applicant will bear the expense of these programs, we think it should be given the opportunity to supervise directly and to carry out, or to contract out, the widest possible range of programs, subject to these programs having been approved by the Service.

Enforcement

Should the Service determine that the Applicant, or its contractors or subcontractors, or the unions, have

breached the preference system agreed upon, or where an approved program is not being carried out effectively or in good faith, the Service shall report the matter to the regulatory Agency. It must have the power to apply effective sanctions to the Applicant, the unions, contractors, and subcontractors, for all violations of the preference system and for any failure to implement, or to carry out, the various employment and training programs.

What standard should apply for the effective policing of the preference system? Mr. John Ellwood, testifying on behalf of Foothills before the Berger Inquiry, stated:

It seems to me the appropriate measure to use here is to relate the number of positions filled by northerners against the number of applicants from the North If we are successful with northern hire you should gauge that success by looking at how many people we are able to place in relation to how many applied, not in relation to how many southerners we hire
(MVPI, F171-26525A).

The onus should be on the unions and the contractors to demonstrate why a preferred Yukoner, approved by the Service, was not dispatched to or hired for a particular job. Mr. Ellwood, when asked if the onus should be on the contractor to show why he had not hired a northern applicant, answered, "Yes The onus would be on him to show us that in fact he could not or had some other reasoning for not hiring a northerner" (MVPI, F171-26526).

Timing

It is vitally important that the Service begin to operate as soon as possible after the government has given approval-in-principle for the construction of a pipeline across the southern Yukon. To ensure that the policy board of the Service meets immediately after such a decision, we think that the Department of Indian Affairs and Northern Development should accept the responsibility for bringing together the parties that will be represented on the policy board in an initial meeting within one month of the granting of the approval-in-principle.

The Applicant should be responsible for a public advertising campaign, as described above, to discourage southern Canadians from flocking to the Yukon to seek employment. This campaign should be considered at the first meeting of the policy board.

Assessment of the skill and experience of potential trainees must begin right away, and long-term training

programs to prepare Permanent Yukon Residents for skilled employment should begin soon thereafter, especially with respect to skills that require extensive institutional instruction. All training programs that begin before employment on the pipeline should regard the beginning of employment as the day of graduation from the program. Delays between the end of institutional training programs and the commencement of employment must be avoided.

The Applicant should understand that any delay in providing the information that is necessary for the Service, and any delay in commencing particular programs, could result in substantial monetary penalties, and force the regulatory Agency to order a delay in pipeline construction. For instance, the Applicant must provide the Service with a full breakdown of its proposed work force, as recommended, at least one year before the start of any activity related to pipeline construction. We have already spoken of the need for contingency plans and for flexibility on the Applicant's part as the project moves towards construction.

No seasonal work on the pipeline should be permitted in the Yukon unless the Applicant and all of its contractors and subcontractors have provided the Service with details of their work force requirements 30 days before the employment of that force. Timing requirements, made as mandatory stipulations, should permit some flexibility, but they must have general application. We hope these strict measures will ensure that the Service is always provided in advance with sufficient detailed information for it to function effectively.

Women in the Work Force

Women are moving increasingly into traditionally male occupations, and female participation in all aspects of this project should be encouraged and facilitated. Generally women are concentrated in clerical and administrative roles, but these positions, as well as supervisory jobs, should be open to both men and women, and they should be subject to the same preferential hiring and training stipulations as any other positions on the project.

All employment and training positions should be open to both women and men. Should there be any doubt on this matter under present legislation, let us state now that all women should be specifically guaranteed equal opportunity for entry into all employment and training positions, subject to the preferential system we have recommended.

Operation and Maintenance Phase

Hiring and Employment Policy

The relatively few permanent jobs – slightly more than 200 – that will be required to operate and maintain the Yukon section of the pipeline will be one of the long-term benefits of the project. Mr. Ellwood, testifying on behalf of Foothills, agreed that large-scale projects, based on non-renewable resources, "have rarely provided permanent employment for any significant number of native people" (2-300). As a matter of policy, the Applicant does not intend to continue this pattern.

Hiring preference for the positions that do not require previous pipeline experience will be given to Yukoners who have the requisite skills to fill them. At least 50 per cent of the initial work force may, according to the Applicant, be made up of local residents. Training programs will also be extended so that candidates for permanent employment may be given the necessary instruction and experience, and so that they may be prepared to take up this employment when the pipeline begins to operate. Once again, preference will be given to Yukon Indian residents.

The long-term objective of the Applicant is to fill all of the permanent jobs related to the pipeline with Yukon residents, recognizing that some senior or highly technical jobs may require many years of pipeline experience as a qualification of employment.

By creating training positions in the Yukon, and continuously upgrading the skills of the local people, Foothills should be able eventually to fill all of its positions with Yukoners. No time frame has been put on the completion of this objective, but in the next section we shall discuss the training programs that Foothills has proposed for permanent staff in the Yukon.

Finally, we wish to comment on another important matter. Traditionally, operating pipeline companies in Canada have not been unionized. Neither Alberta Gas Trunk Line Company Ltd. nor Westcoast Transmission Company Ltd., the two sponsoring companies of Foothills, have unionized operations. Concern was expressed to the Berger Inquiry over the fact that many local residents, who will have worked on the construction of the pipeline – and it will almost undoubtedly be entirely a union project – might be denied the opportunity to transfer to permanent employment. It was said then that the operating

company would probably screen out persons who were, or had been, union members, for fear that they might attempt to organize the permanent staff. We presume that Foothills will not discriminate against Yukoners who may happen to have been members of one or another union during the construction phase of the pipeline, and that no such consideration will form any part of Foothills' future hiring policies.

Training Policy

To ensure that Yukoners will enjoy the long-term benefits of employment offered by the pipeline, the Applicant proposes to rely upon an extended version of Nortran, an existing training program that provides on-the-job training, complemented by a variety of institutional programs over the full range of positions available on an operating pipeline. For the purpose of our discussions, Nortran trainees are employed with Alberta Gas Trunk Line and Westcoast Transmission. Both are operating companies, and are the joint owners of the Applicant.

From the inception of Nortran in 1970, the sponsoring companies have guaranteed permanent employment to everyone enrolled in the program. This guarantee has obviously restricted the number of trainees: for instance, at the end of April 1977, Alberta Gas Trunk Line had only 25 Nortran positions.

We have been told that Alberta Gas Trunk Line and Westcoast Transmission have assured the Applicant that there will be enough on-the-job training positions to enable Foothills to train a work force that will be composed, in large part, of Yukoners, once the approval-in-principle to construct the line is granted.

Mr. William Deyell, a Director and Senior Vice-President of Alberta Gas Trunk Line, testified that his company could provide Nortran with more than 110 training positions at various operating facilities in Alberta. Of Westcoast Transmission, Mr. Deyell said:

In discussion with Westcoast management personnel, they have said Westcoast could provide on-the-job training for up to the following numbers of trainees within their pipeline operations and maintenance department.

Pipeline maintenance men	15
Compressor maintenance men	40
Controls technicians	6
Mechanical technicians	25
Warehousemen	5
Apprenticeship trainees	10
Clerical and stenographer	10

(MVPI, F170-26444).

The total amounts to 111 training positions with Westcoast Transmission, giving a combined Westcoast Transmission and Alberta Gas Trunk Line total of 221 openings for trainees from the Yukon. This total is more than the projected work force for the entire Yukon operation.

To date, Nortran has concentrated on training individuals with few skills and relatively little education. The program is limited to northerners, primarily to Indians resident in either the Northwest Territories or the Yukon for at least four years, although a few trainees have been recruited from northern Alberta and northeast British Columbia. Foothills proposes to fill these new positions, which will be created upon the granting of the approval-in-principle, primarily with Yukon Indians, and it has already begun to recruit them. Mr. Burrell told the Inquiry that Yukoners have expressed a great deal of interest in the Nortran program.

We have been told that an individual may spend four, five, or six years with Nortran to qualify as a skilled operator or technician. Until a pipeline is in place in the Yukon, this training must of course take place in southern Canada. Nortran helps the trainees and their families to relocate in communities in Alberta and British Columbia, and it provides counselling and other assistance to ease their adjustment. Despite this kind of assistance, many Yukoners may find themselves in the dilemma that Mr. Tom Graham of Upper Liard described to us.

I've got one of your forms . . . from Nortran. I've already filled it out. It's sitting in my desk and it's been sitting there for two months because I don't want to go down to Alberta to take training, but I want the training (18-2374).

Nortran representatives realize there may be some difficulty in retraining their trainees during the construction phase of the pipeline, because they may abandon the program, attracted by high-paying construction jobs. It was felt that this problem could be met, at least in part, by sending Nortran trainees to appropriate on-the-job training positions that may be available during the construction phase and that would complement the normal Nortran program.

Recommendations

We concur with Foothills' policy that as many Yukon residents as possible should be employed during the construction of the pipeline, and after it is completed.

The positions that do not require previous pipeline experience should be filled by Yukoners on a preferred basis. The skilled positions that require training and pipeline experience should also be filled locally whenever possible. To achieve this objective, Foothills must launch an expanded Nortran training program immediately on receipt of the approval-in-principle of a pipeline through southern Yukon. Time is essential.

The period between the start of such an expanded training program and the start of operations will probably be five or more years, a delay that should allow sufficient time to train Yukoners who are willing to relocate temporarily in southern Canada, and that should also allow them to achieve the requisite level of pipeline experience for most of the operation and maintenance positions. In summary, we recommend that Foothills be required to develop an extensive recruiting and training program – essentially an expanded Nortran program – to ensure that the benefits of permanent employment accrue to Yukoners from the start of operations. Preference should be given to Permanent Yukon Residents.

The program should be funded by Foothills or its sponsoring companies, and it must be approved and monitored by the Agency. Foothills and its sponsoring companies should provide the Agency with whatever information and access to employment and other records it may require. The Agency should have the power to assess substantial financial penalties against the Applicant for failure to carry out these recommendations.

We have explained above why we think the policy board of the Service should cease to exist when the operation phase of the pipeline begins. However, because the Applicant must be responsible for a continuing training and employment program, so that an increasing number of Yukon residents are employed in permanent pipeline jobs, the responsibility of enforcing this policy and, if necessary, of assessing severe monetary penalties, during the operating phase should pass to the Government of Yukon.

Until the proposed pipeline through the southern Yukon begins operation, training in pipeline operation and maintenance can occur only in Alberta and British Columbia. Many local residents who are interested in permanent employment may not be willing to leave the Yukon for long periods of training. Therefore, a program of on-the-job training, providing the maximum number of training positions possible, must be initiated in the Yukon as soon as the pipeline begins operation. Again, Permanent Yukon Residents should have first priority in securing these positions. As they acquire the skills necessary to qualify for normal employment

positions, they should have first preference for any openings that occur. This requirement must form part of the permit for the pipeline, and it must be monitored and enforced by the Government of Yukon, which should be able to assess substantial monetary penalties to ensure that these recommendations are implemented. Too often, the history of northern resource development has been witness to noble intentions and dismal results. This history must not be repeated with this project.

A Project Agreement: Unions, Contractors, and Foothills

At the hearings of the Inquiry we were told that construction of the pipeline will be a unionized project and that an agreement with the unions will be negotiated. We were also told a special agreement, or several special agreements, will be necessary to cover labour relations for the pipeline and its ancillary construction. The reasons given are the following:

1. A special project agreement is "essential in order to ensure that there will be no strike disrupting the building of this line" (8-1309).
2. A project agreement must be struck to set out the scope of union jurisdiction over the pipeline project. Special negotiations will be necessary to determine the level and nature of the contracts that should be subject to collective agreement. Especially important in this context is the role that local contractors and subcontractors will play, and the relation they will have to the work of the project.
3. A special project agreement must be negotiated to deal with matters that are not part of the standard agreements, such as a hiring preference for Yukon workers, a Manpower Delivery Service, and a local work-pool rotation scheme.

Present Labour Relations in the Pipeline Construction Industry

The four trade unions that we mentioned earlier control all union construction of mainline pipelines and distribution laterals in Canada. This monopoly is the result of special agreements negotiated between the unions and the 45 member firms of the Pipe Line Contractors Association of Canada.

The special agreements, generally of two years duration, are negotiated by each of the four unions with the Pipe Line Contractors Association. The term of the four current agreements extends from May 1, 1977, to April 30, 1979. They outline the scope of work of the various trades within each union and cover such general subjects as union recognition, hiring procedures, working rules, and grievance procedures. The agreements also cover special requirements that must be met in the construction of northern pipelines and in the standards of northern pipeline construction camps.

The construction of pumping and compressor stations, metering stations, and ancillary facilities involves 15 building trade unions, including the four major pipeline unions. Unlike the four pipeline unions, the other building trade unions do not have special pipeline agreements. With a few exceptions, the union contractors that specialize in this kind of construction are parties to standard industry agreements with the building and construction trades. Presumably, in the absence of special project agreements, these agreements would be binding. The other building trade unions have negotiated project agreements in the past.

Mr. James McCambly, Executive Secretary of the Advisory Board for the Building Trades in Canada, has testified that a project agreement that "took in all of the conditions that applied to all of the trades" is not the current practice in the industry (MVPI, F181-28085). More common, and the preferred course for the building trades, is the negotiation by all the trades of general conditions that cover common and essential matters and apply to all of the unions and contractors. The result is a project agreement covering general conditions that is appended to the applicable agreement for each trade. The Syncrude project in general follows this procedure. On the other hand, there is no Canadian precedent for special pipeline project agreements that cover the mainline work of the four major unions. The construction of the Alyeska oil pipeline in Alaska was carried out under an overall project agreement negotiated between Alyeska, the owner company, and the unions.

A Project Agreement for the Yukon

Economic magnitude alone would seem to demand an overall agreement for projects such as the Alyeska oil pipeline and this project. Whatever obligations there are on contractors and unions are found in contracts, labour agreements, or legislation.

Mr. Jack Saker, Construction Coordinator of Foothills, told us that his company is not a party to negotiations between the unions and the contractors, but it is kept informed of these negotiations.

As the negotiating process to develop such agreements is a complex and specialized function, and has evolved over the years, it should be conducted by the Pipeline Contractors Association, which has a competence in this negotiating process, and which can maintain practices that have been developed, or is in the best position to develop, and incorporate new practices if they are required, such as the incorporation of the northern natives into the work force (2-267).

How then does Foothills intend to ensure that the terms and conditions concerning pipeline employment, as contained in the permit, are carried out? Mr. John Burrell, Vice-President of Corporate Development of Foothills, said:

... we will ask the contractors to negotiate an agreement for us, and in that arrangement we'll ... what we will ask him to negotiate will be an agreement which will include the terms and conditions, of course, which are set on this project by the permit and also the policy positions that the company itself has (7-1224).

The situation has some disturbing implications. The stipulations in the permit that cover pipeline employment and training – stipulations that will be part of the government's agreement to allow Foothills to build the pipeline – will be requirements that are made of Foothills, not requirements made of the unions or the contractors that Foothills may engage to carry out the construction work. Such stipulations may become meaningless if they are not translated into special obligations that are binding on the contractors and on the unions. Yet Foothills appears ready to leave these matters to a negotiating process in which it plays no role. What may be negotiated into a project agreement may also be negotiated out of it.

When Mr. John Ellwood, Manager of Northern Affairs for Foothills, was asked if his company's employment and training policies and programs might be constrained by the collective bargaining process, he said, "I guess theoretically it could be restricted by what comes out of the collective bargaining process in implementing policies here" (2-346). This same "theoretical" problem was acknowledged by Mr. Richard Littledale, Vice-President of Operations and Maintenance for Foothills. He recognized that a policy of preferential hiring of local people, for instance, might be left to a negotiating process that could view local hiring differently from the proponent of such a policy "if there was a vast number of union membership out of work" (2-348).

The terms and conditions of employment must be binding and enforceable on all parties affected by them. At first glance, the obvious answer is to legislate – to pass a law – to make the terms and conditions of employment that are contained in the permit binding on everybody, including Foothills, the unions, and the contractors. But like many easy answers, this one may also be fraught with difficulties. As Mr. Saker said, "If . . . conditions are set down unilaterally, the potential might exist for labour problems when any attempt to implement these procedures is made at the commencement of construction" (2-269).

Although the recommendations for employment and training that we have discussed in this report must be binding on all parties, the general provisions we have suggested may be implemented and detailed in a variety of ways. We now suggest that the permit stipulations for employment and training should not reflect a greater level of detail than those already expressed in this report.

The distinction we make here is an important one. General conditions will be set down by the permit stipulations. As general principles, however, they will afford substantial flexibility to parties concerned, so that they can devise their own best approach to or mode of implementation of them. As indicated in our discussion of pipeline employment and training, the unions generally have accepted the fundamental principles, if not all of the particular details, that we have recommended. Many of our recommendations are closer to the unions' view than to Foothills' view of these issues. By leaving the particular application of our recommendations to the negotiation process, we feel confident that results, acceptable to all, will be achieved.

To guarantee that all of the requirements of the permit are adhered to by the contractors and subcontractors, Foothills should be required to give assurance that the stipulations of its permit are a term of all project contracts, and that the violation of them will be deemed to be a fundamental breach of contract. This violation would permit Foothills or the main contractors to terminate contracts that have been breached. Monetary penalties should also be expressly included in all contracts as an alternative to the termination of a contract.

Having created contractual obligations to apply the terms and conditions of the permit, we could simply leave the contractors to work these stipulations into a project agreement. However, at least two problems remain. First, the contractors and unions may not effectively or accurately translate the stipulations of the permit into a workable and enforceable project

agreement. Secondly, the agreement reached may be difficult and cumbersome to enforce, and only the contractors and the unions, whose interests may not always conform to the interests of Yukoners, would be parties to it. The responsibility for enforcing the stipulations would run from the regulatory Agency to Foothills, to the contractors, perhaps to the subcontractors, and on to the unions. This chain needs to be shortened.

We therefore suggest that a special three-party project agreement be struck among the contractors, the unions, and Foothills. The Applicant needs to be involved only in matters dictated by the permit. The three parties might decide to reach an agreement that is separate and distinct from a more comprehensive project agreement negotiated exclusively between the contractors and unions. Whatever the approach may be, the special agreement should reflect compliance with the stipulations of the permit and must supersede provisions in any agreement that inhibits implementation of these stipulations. As a party to this special agreement, Foothills would be in a position to enforce it directly.

This arrangement still leaves the first problem: the details of the agreement. To solve this problem, we suggest an additional requirement in the permit. Before any union member or contractor begins to do any

construction work on the pipeline, Foothills should be required to obtain a special licence from the Agency to proceed. The Agency would grant this licence only after it had approved the special agreement that we have discussed and that had been duly executed on behalf of all the unions, contractors, and Foothills. To facilitate this process, we suggest that the Agency should participate in the negotiations as an observer.

Finally, this special agreement should also contain a description of the nature and scope of union jurisdiction over the pipeline project. It is important that the role of local contractors and subcontractors and their relationship with the project be defined because, throughout our hearings, Foothills has assured the Inquiry that local contractors would have access to work on the pipeline. Many local contractors are not unionized. When asked how this problem would be handled, Mr. Burrell indicated that it would have to be worked out between the local contractors and the unions. We suggested, as one possible solution, the formation of separate companies by local businessmen; these companies would be regarded as union operations for the purpose of pipeline work. Foothills must work out a satisfactory method to assure local contractors access to the project, and this method must be stipulated in the special project agreement that is presented to the Agency for approval.

6 Economic Impact



Ore buckets carry material from open pit to the mill at the Cassiar Asbestos mine, Clinton Creek (Yukon government)

The opening of the Canol Refinery in Whitehorse, 1940s
(Yukon Archives)

Ore sacked for shipment at Keno Hill in 1930
(Public Archives of Canada)

Construction of the Eagle River bridge on the Dempster Highway, 1976 (Whitehorse Star)

High school students learn vocational skills, Whitehorse
(Yukon government)



Introduction

The Yukon economy is built on a very narrow base, the mining and tourist industries, but the major employers in the Yukon are the federal and territorial governments. Because no industrial base has developed to complement the mining industry, the private sector of the economy is largely dependent upon the extraction of mineral resources and their shipment to markets outside the Yukon.

Individuals who rely on wage employment for their livelihood and who participate full-time in the wage economy are dependent, either directly or indirectly, on the strength and growth of these industries and on continued government involvement in the economy. However, not all Yukoners have chosen to be fully dependent on the wage economy; many of them choose instead to participate in a traditional land-based economy in which the primary activity is the harvesting of natural resources by hunting, fishing, and trapping. Still other Yukoners have chosen to mix part-time or seasonal wage employment with the pursuit of traditional activities.

The Applicant's proposal would create a massive influx of labour and capital into the Yukon, which would affect each of these three economies. One problem confronting the people of the Yukon is how to manage this project and the economy during the period of pipeline construction to minimize the adverse effects of the project on the people themselves and on the economic activities that are the base of the present economy. In addition, long-term development of the Yukon will depend on obtaining from the pipeline significant economic benefits that can carry over into the postconstruction period.

The Yukon has experienced large-scale, short-term developments in the past. During two years at the peak of the gold rush, more than 30,000 people arrived in the Yukon, which then had a population of approximately 4,000. With the construction of the Alaska Highway during World War II, the Yukon again witnessed the effect of an in-migration of more than 30,000 people, primarily American soldiers and civilians, adding to a population that had once again fallen to around 5,000. History has shown Yukoners that short-term booms bring few lasting benefits.

The adverse effects of these intensive, large-scale but short-term, developments can be very significant, because large and rapid movements of people and capital induce high rates of inflation, and destabilize the economic environment of the existing industry. This

chapter will examine the possible impact of the project on the Yukon's population level and how this impact can be minimized. The probable effect of the pipeline on the prices of goods and services in the various sectors of the Yukon economy and on government finances will also be examined.

The project is quite unlike the Alaska Highway, which opened up a transportation corridor to and through the Yukon, encouraging new businesses and services for the people of the region. Two potential long-term benefits to the Yukon from the construction of a pipeline have been suggested by the Applicant: the provision of a supply of natural gas to the Yukon communities and the possibility of hydroelectric developments related to the pipeline project. Both of these suggested benefits will be discussed later.

This chapter will not analyze in great detail the impact of the project on the mixed or land-based economies. There is very little reliable information available on the significance of these economies to the Yukon as a whole, or on the degree of the people's participation in the different economies. To the extent that the implications for these economies will be social, and to the extent that the data are available, they will be discussed in Chapter 7. However, one of the most pressing needs revealed by this Inquiry has been the need for better statistics and more detailed information about the region's economies.

In-migration

The Foothills construction schedule calls for roughly 2,000 to 2,300 workers to be employed on pipeline construction during the peak period of two summers and one winter, with a somewhat smaller work force in the year following the second summer. The Yukon labour force of approximately 11,000 does not have the manpower, the skills, or the experience to meet the demand for labour that this kind of construction will generate, or for the secondary activities that will be associated with pipeline construction. Therefore, the majority of workers needed to fill these jobs will have to come from outside the Yukon.

The Attraction and the Problem

If the pipeline project proceeds, its size, the publicity given it, and the prospect of high wages will draw

thousands of people to the Yukon. The project has been described as the largest private construction project in history, and many romantic, but ill-informed, persons will be tempted to seek their fortunes in a land that is still famous for the gold rush of 1898. It should be noted that this process has already begun. Mr. Herbert Doris speaking at a community hearing in Faro in June commented on the current situation:

Already we have an influx of transients into the Yukon and [as] we shall see in the future, the number will increase until all available accommodations will be filled. People will be camping anywhere they can find a suitable spot, preferably close to a community where they can buy groceries and necessary items, all waiting for a job on the pipeline (20-2617).

The Applicant has already been called upon to issue press releases in southern Canada to advise the public that job opportunities related to the pipeline at present do not exist in the Yukon.

Yukon communities will have to accommodate the needs of these in-migrants, often at considerable financial and social cost, only to see most of them leave at the end of the construction period. The anticipated social and economic impacts of massive in-migration have been a major source of concern in the Yukon, as demonstrated by Commissioner Art Pearson's testimony before the Inquiry:

I refer to the truly frightening prospect of an uncontrolled in-migration of southern Canadian workers stampeding into Yukon, looking for employment on the pipeline project. I state now for the Board's information and for the record that an uncontrolled influx, a stampede of southern Canadian workers into Yukon will do irreparable harm to the Yukon, its communities, and its people. All manner of problems will flow from such an influx and it must not be allowed to happen (43-5856).

Although the pipeline will be built through three provinces and Alaska, as well as through the Yukon, the problems of in-migration are expected to be most acute in the Yukon. Conflicting and inconclusive evidence was presented to the Inquiry on the magnitude of problems that have been coincidental with rapid population growth in the Fort McMurray area of Alberta during the development now going forward there of the Athabasca tar sands. Evidence regarding in-migration during pipeline construction near Fort Nelson, British Columbia, during the mid-1960s suggested that it had caused few problems there, but a sharply contrasting picture emerged from testimony on the impact of in-migration during recent construction of the Alyeska oil pipeline in Alaska.

During construction of the Alyeska pipeline in the 1974-75 period, an estimated 80,000 to 100,000 people

migrated to Alaska, a substantial addition to the existing population base of approximately 330,000. Pressures created by these in-migrants intensified the dislocations that are inevitably caused by massive projects of economic development. Local economies were destabilized, the demand for government and commercial services escalated, and the rate of inflation rose far more quickly than that of the United States as a whole.

The magnitude of the Foothills project, relative to the Yukon economy, is at least comparable to the size of the Alyeska pipeline in relation to the Alaskan economy. In addition, the history of the Yukon and its romantic role in Canadian folklore closely resemble that of Alaska in American folklore. By contrast, the construction of a pipeline in northern British Columbia took place without attracting national attention. These factors have led the board to conclude that the recent Alaskan experience is more valuable than that in British Columbia for gauging the volume of in-migration in a locale such as the Yukon and in predicting its social and economic impacts. Differences between the two projects will arise from the way in which the situation in the Yukon is managed rather than from differences in the situations.

In fact, given the small and widely dispersed population of the Yukon, its local infrastructures seem even less capable of accommodating a large influx of in-migrants than was the case in Alaska. Except for Whitehorse, the communities of the Yukon are quite incapable of absorbing many new residents. The arrival of a very large number of highly mobile, transient workers who expect to find high-wage employment on the pipeline, and who are accustomed to the comforts of southern Canada, could strain or break the communities' capacity to provide goods and services at existing standards.

The degree of the ensuing social disruption and economic dislocation would vary, depending on such factors as the population of each community and its proximity to a construction camp; the route chosen for the pipeline; the success of various programs that would be implemented to discourage in-migration; and the Applicant's ability to avoid delays in construction that could be compensated for only by hiring yet greater numbers of workers. Of the communities along the pipeline routes being considered in this report, those with predominantly Indian populations would be particularly susceptible to social, economic, and cultural upheavals.

The history of the Yukon offers numerous examples of large, volatile, and virtually uncontrolled movements of population and of sudden growth, accompanied by

short-term benefits, followed by a severe economic decline and human distress. In presenting evidence before this Inquiry, all witnesses – whatever their attitudes might be towards other matters – were unanimous in insisting that, if the project is to go forward, it must do so in a controlled and orderly manner. This attitude is reflected in the testimony of Mr. R. Campbell, speaking for the Whitehorse Chamber of Commerce. He stated, "The Chamber has in the past, taken a position in support of the Alaska Highway route, but has also stated that an orderly and controlled project is needed if Yukon is to benefit from pipeline-related development" (9-1466).

Planning must be predicated on the assumption that, without such control, in-migration of a volume proportional to the Alaskan experience is a distinct possibility in the Yukon. To ensure orderly growth, two controls are essential: in-migration must be restricted to those persons actually required for the construction of the project, and for the secondary activities associated with it; and measures must be devised that will minimize the adverse economic and social effects on the local communities caused by the in-migrants who come to work, or to look for work, on the pipeline. A first step in controlling in-migration and its associated impacts is an accurate assessment of the number of in-migrants that are likely to arrive. Although there are adverse implications from either an understatement or an overstatement of in-migration, the risks associated with an understatement are considerably more significant.

Estimating In-migration

In-migrants may be divided into two classifications: those who have been hired for work in southern hiring-halls and those who arrive in the Yukon hoping to find work on the pipeline or elsewhere in the Yukon economy. If the Applicant's proposed southern-hire policy (described in Chapter 5) is effective, no pipeline jobs will be available to workers from outside the Yukon who were not previously hired for such work in southern Canada. However, many of those looking for work in the Yukon will be able to find employment in other sectors of the economy, because more jobs will be created than can be filled by Yukoners. Nevertheless, there will no doubt be many who will fail to find jobs, and there will probably be a small and possibly troublesome number of persons who will arrive without any intention of finding employment, "the con-artists and deadbeats and assorted undesirables" as Mr. Bob McCauley of Carmacks termed them (28-3268).

Foothills has estimated that the total population increase during the peak period of construction will run to about 4,600 persons. Of these, some 1,600 will be housed in isolated construction camps, which, according to the Applicant, means that they will have no significant impact on the Yukon economy. The remaining 3,000 will include construction workers who will not be living in camps, in-migrants working in secondary activities associated with pipeline construction, and their dependents. The influx of in-migrants will be concentrated in the initial stages of each construction season, and it will be disproportionately large during the summers. Foothills contends that their impact will be no different from that of the tourists, of whom about 300,000 visit the Yukon annually. This view was expressed by Mr. John MacLeod for Foothills:

I also say it is very difficult to make a distinction between these people and a typical tourist. The average tourist that passes through here seems to be Alaska bound, and he only stays here for a couple of days and I expect to see the same pattern with employment seekers (29-3420).

The Applicant has made no estimate of the number of in-migrants likely to remain in the Yukon as permanent residents after the construction phase is completed, other than to estimate the number of persons who will be involved in the operation and maintenance phase, the number of people in jobs induced elsewhere in the economy, and their dependents. If the Alaska Highway route is chosen, 110 persons will be required for the operation and maintenance of the pipeline, and another 79 will staff the Applicant's Whitehorse office, along with the additional people that will be required by the increase in the economy that these new residents will represent. Twelve additional operation and maintenance employees will reside in Watson Lake, although they will be employed by Westcoast Transmission to operate and maintain a section of the pipeline that runs through northern British Columbia. Although the number required for operation and maintenance is relatively small, and it may be composed at least partly of Yukoners trained through the Nortran program, it will surely have some impact. For example, in Beaver Creek, one of the communities along this route, there will be 22 employees required to man a compressor station nearby, and the population there could be increased by as much as 40 per cent. In Beaver Creek and the other small Alaska Highway communities where the operation and maintenance staff will be stationed, the local people look forward to the additional services that a larger population would warrant.

The Applicant has stated its willingness to undertake programs to lessen the impact of in-migration. It is clear, however, that Foothills' in-migration estimates were based on the assumption that its policies and programs, such as the southern-hire policy, a Manpower Delivery Service, and others discussed in Chapter 5 would be successful in sharply limiting in-migration. These estimates are open to serious question and were subjected to extensive scrutiny during the Inquiry's hearings.

Of the numerous critics, the Urban and Rural Systems Associates (URSA) panel offered the most trenchant criticism and divergent figures. Based on an investigation of in-migration to Alaska during the construction of the Alyeska pipeline, and an analysis of the Yukon economy, the URSA panel estimated that approximately 1,800 jobs would be created elsewhere in the Yukon economy during the period of peak construction. They concluded that between 20,000 and 30,000 in-migrants would be drawn to the Yukon during that two-year period, and that the project would generate an annual average net population increase of between 6,000 and 8,000 persons in each year (Exhibit 145, Evidence of URSA, p. 17). In arriving at these figures, they took into account the Applicant's declared intention of avoiding the Alaskan in-migration situation. Nonetheless, they concluded that, even with advance planning directed at controlling it and programs to mitigate the effects of unavoidable in-migration, the higher visibility and accessibility of the Yukon project would largely offset the benefits of the proposed programs.

The URSA panel's estimates and conclusions were not the only ones at variance with those of the Applicant, although they showed the greatest discrepancy. Other witnesses also presented evidence on in-migration that called into question the Applicant's assumptions. Three criticisms were levelled against Foothills' estimates. First, it was suggested that Foothills had underestimated the labour force that would be required to complete the project according to the schedule it had proposed; second, that the Applicant had underestimated the effect the project would have in stimulating other sectors of the economy, because it had minimized such things as the impact of construction camps on local business; and third, that the Applicant had erred in assuming that an unemployment rate of 12 per cent in the Yukon would act as a deterrent to in-migration.

Manpower Requirements

As in any major economic development, manpower requirements are directly tied to the project schedule: delays are most costly and more complicated than the

hiring of additional workers. As testimony by the Applicant indicated, it would cope with any delay in the construction schedule by increasing the number of workers on the job (31-3745-47). Adherence to a schedule is, in turn, dependent on a number of unpredictable variables, such as the weather; coordinating the manufacture, supply, and delivery of construction components; unexpected mechanical or technical problems; consultations with monitoring agencies; discovery of archaeological sites; and productivity of the labour force. Of all these variables, the Applicant's estimates of productivity were examined most thoroughly.

Foothills' estimates of productivity for the Yukon portion of the pipeline run a full 20 per cent higher than the estimates of the productivity of American workers for the Alaskan portion of the route. Although somewhat higher productivity might be expected because of easier terrain and the expertise of Alberta Gas Trunk Line and Westcoast Transmission – Foothills' major shareholders – in building pipelines through western Canada, Foothills' projections have been treated with skepticism from many quarters. The United States Federal Power Commission, in its *Recommendations to the President*, stated, "Perhaps there is an explanation for the vastly higher and constantly increasing productivity for the Alcan members in Canada, but none is apparent from the material provided" (VIII-38).

Any change in route might also alter manpower requirements dramatically. The Klondike Highway and one of the Tintina Trench routes are approximately 20 and 10 per cent longer, respectively, than the Alaska Highway route, and the use of either of these other possible routes would directly affect manpower requirements and, as a consequence, the accuracy of Foothills' in-migration estimates. A route within the Tintina Trench would require construction of a local road along at least one-fifth of its length which would require additional manpower.

In standing by its estimates, Foothills also denied that the gross underestimation that occurred on the Alyeska project, for which only 6,000 to 8,000 workers were thought to be necessary while 24,000 were ultimately required, would be repeated in this project.

Induced Jobs

In claiming that a maximum of 420 jobs would be created in sectors of the economy other than pipeline construction, Foothills seems to have underestimated the impact of its own project on the Yukon economy. The size of Foothills' project will create new jobs for in-migrants in virtually every part of the economy.

Secondary jobs will be generated in many pipeline-related industries and, at the same time, new jobs will be indirectly generated in service industries, such as hotels, restaurants, and social services. In addition, neither Foothills' nor URSA's estimates make allowance for any increase in manpower over Foothills' original projections. More construction workers on the project will certainly create more jobs elsewhere in the Yukon economy.

In estimating the number of non-pipeline jobs that would be created by the project, Foothills excluded the vast majority of these secondary and indirect jobs and limited its definition of pipeline-induced jobs solely to those created by the expenditures of Yukoners employed on the project. However the effect of the construction workers, and of the in-migrants employed in secondary and indirect jobs and living with their dependents in Yukon communities, will be to create still more jobs in the Yukon economy. A multiplier was used by Foothills and other parties to attempt to quantify the ultimate effect of the number of construction jobs on the total number of secondary and indirect jobs that will be created in the economy. Because of the assumptions Foothills made about the effect of policies discussed earlier, Foothills estimated that its project would have a very limited multiplier effect.

It should be immediately apparent that the Applicant's project will stimulate the Yukon economy and create many forms of employment that could provide job opportunities for in-migrants. For instance, the provision of goods and services to 1,600 workers living in construction camps will require the development of a network of facilities and personnel in communities along the route, particularly in Whitehorse. Just as Fairbanks was the staging base for Alaskan pipeline activity, so Whitehorse will be for the Yukon project. The Applicant rejected this analogy, claiming that Whitehorse would be only one of three depots for the project. However, at present, only Whitehorse has the infrastructure to serve as a major depot, and the city will undoubtedly become the primary supply centre for the project.

Personnel working in servicing capacities, such as those that will be required in Whitehorse, were not included in the Applicant's estimates of pipeline-related jobs. The URSA panel projected that the multiplier effect discussed earlier would be significantly higher than Foothills' estimate and that 1,800 secondary and indirect jobs would be generated by Foothills' peak employment of 2,300 people.

In 1975, when a peak labour force of 24,000 people was employed on construction of the Alyeska project,

approximately 35,000 new jobs were created elsewhere in the Alaskan economy. Most of these new jobs were attributed to economic activity generated by the pipeline (*Exhibit 145, Evidence of USRA, p.4*). Although the Yukon economy is less developed than that of Alaska, and relatively fewer secondary and induced jobs will be created by construction activity in the Yukon than were created in Alaska, it seems certain that there will be more jobs created in the Yukon than the Applicant has predicted, and that most of these jobs will be filled by in-migrants. In addition to these induced jobs, many Yukoners are likely to transfer from jobs they hold at present to take advantage of higher paying pipeline construction employment. The openings will become available for in-migrants who cannot obtain employment on the pipeline.

Unemployment

Experience with other projects of this type indicates that, despite the rapid growth in job opportunities, the number of in-migrants will initially raise the rate of unemployment above the rate that existed before the project began. During the hearings, Foothills testified that a high rate of unemployment would act as a deterrent to in-migration and that workers would not go to the Yukon if their chances of getting a job were no better there than elsewhere in Canada. But we cannot doubt that the excitement, the activity, and the possibility of the opportunities generated by such a project will offset any sober appraisal based solely on the number of jobs available. Workers eager to earn high wages will regard the situation as a lottery and, because of the high turn-over rate and the active labour market, an individual's assessment of the chances of eventually finding work will not be totally unrealistic. For others, money may be of only secondary importance, merely one aspect of the adventure of participating in a major and well-publicized undertaking.

The Alaskan experience demonstrated that unemployment alone did not deter in-migration. The Alaskan situation is not quite analogous to the Yukon situation because no attempt was made to stem in-migration before the project began. Although an advertising campaign "Operation Intercept", designed to discourage in-migration, was subsequently instituted, the fact that all hiring was done in Fairbanks seems to have cancelled whatever effect the advertising may have had. Foothills is assuming that its policies will avoid the Alaskan experience, but they have undoubtedly overestimated the probable success of their advertising and southern-hire policies.

Conclusions and Recommendations:

It is plain that a certain degree of in-migration of labour will be necessary to build the proposed pipeline and that the impacts of in-migrants over and above this number could seriously disrupt the Yukon's social and economic life. The Applicant has proposed policies that, if strictly enforced, should reduce the number of in-migrants arriving in the Yukon. As discussed in the previous chapter, the hiring of non-Yukoners in southern hiring-halls, and the proposed advertising campaign to deter speculative in-migration, should dissuade a significant number of potential job seekers from going to the Yukon. However, the Applicant appears to have substantially underestimated the number of in-migrants likely to go there, and it has developed policies that, even if successful in their own terms, will be far from successful in really controlling in-migration. More careful consideration of the figures involved and of the possibility of finding other ways to limit in-migration are essential. All of these policies should bring pressure to bear on in-migrants to pay their own costs rather than passing them on to the community. Policies should be also directed toward deflecting in-migrants and transient job seekers from the smaller and most sensitive communities of the Yukon.

Projects on the scale of the proposed pipeline create problems both for local businesses and for their customers, of which more will be said in the next section of this report. Businesses that do not participate in the project will reap little or no benefit from it, but participation may require a substantial capital expenditure to enable a firm to expand sufficiently to meet the demands of a client like Foothills.

In the period following construction of a pipeline, when the stimulus of the project has disappeared and the population has dropped to a level slightly higher than its preconstruction level, the businesses that have expanded will inevitably be left with a capacity that exceeds the needs of the permanent residents of the region. The much smaller permanent population must then pay the costs of the earlier temporary expansion. Commissioner Pearson expressed his fears about the boom-and-bust cycle.

I suggest that one of the problems that has occurred in other places where you don't control in-migration and you don't control the boom-bust economy is, indeed, that you have over-expansion of your facilities so that, when the boom is gone, we're left with a lot of facilities that are uneconomic. We're well aware of that syndrome and are doing our best to control it (45-6092).

Prices and Quality of Service

During the construction phase, increased aggregate demands created by the project's requirements and by the requirements of in-migrants will create severe inflationary pressures, because the expansion necessary to increase supply will lag behind the growing demand. For highly paid predominantly in-migrant construction workers, inflation poses no particular problem. For Yukoners who are not employed on the pipeline, and particularly for persons living on fixed incomes or whose wages are not increased as a consequence of the project, this inflation will seriously erode their ability to maintain their customary standard of living.

During construction of the Alyeska pipeline, the rate of inflation in Anchorage was approximately 30 per cent higher than the national rate of the United States. The cost of living data indicate that this difference was even greater for the Fairbanks area, the area most affected by pipeline construction. The difference between Alaskan and national inflation rates, during this period, was attributable primarily to causes within Alaska, of which construction of the Alyeska pipeline was the most significant.

In addition to bearing the costs of expansion and inflation, Yukon residents worry that they will suffer

Local Economy

In testimony before the Board, the Yukon business community indicated strong support for construction of a pipeline. Businessmen anticipate that the demand for goods and services generated by the pipeline and by pipeline-related activities will stimulate widespread economic growth. In recent years, the Yukon economy has been growing unevenly with expansion in government services, but with no growth in tourism or mining. They sought assurance from Foothills that Yukon businesses would be able to participate both in construction of the pipeline and in secondary activities related to the project.

Not all business interests will benefit equally from the increased economic activity generated by construction of the pipeline. Some industries, particularly mining, will have to pay higher costs that would not be offset by an increase in production or sales. The benefits to local businesses will depend on the route that is chosen: the benefits to communities off the route will not be as significant as the benefits to those along it.

from deteriorating services, a fear expressed by Mr. G. Sutta of Mayo: "It seems only to take – to obtain a minimum of maintenance – and if now, the pipeline job shows up, the best man and the best equipment will undoubtedly be diverted to the pipeline job, leaving just the rest for the outlying communities" (23-2881-82). The pressure on businesses and services to meet the schedules of the largest customers will often supersede concern for meeting the demands of local smaller customers. Many businesses are likely to find it difficult or impossible to serve efficiently an expanded clientele and to train new staff to meet the expanded demands. A high rate of turnover will reduce the quality of the service. The turnover of staff in Alaskan banks, for example, in 1975 was more than one hundred per cent (7-1162). Clearly, participation in the pipeline project will pose problems during both the construction and the postconstruction phases for local businesses and their long-term customers. If inflation, the creation of excess capacity, and deteriorating service are to be avoided or, at least, minimized, local business participation in the project will require careful planning.

It is difficult to assess the present ability of Yukon businesses to increase their capacities, mainly because the Yukon economy is already heavily dependent on a physical and economic infrastructure that supports a tourist industry. Every year, the Yukon receives more than 300,000 tourists, an indication of the economy's ability to expand and contract as the great majority of these tourists arrive in the summer. Nevertheless, we should not assume that this kind of excess capacity can be easily reoriented to meet the demands of pipeline construction and in-migration. Moreover, during the summer, unless tourism is seriously curtailed, the demands related to the project will be in addition to the demands of tourism.

Local Business Participation

Foothills has made no explicit statement of the extent to which local businesses may be involved in the project, although it has issued statements of general policy that promise to maximize, within the practicable limits, local participation, and has indicated a willingness to explore ways to organize and plan its dealings with local businesses to minimize the pressures that would lead to inordinate inflation or expansion. To accomplish the objective of maximizing, within practicable limits, the participation of local businesses, Foothills has initiated discussions with representatives of the Whitehorse Chamber of Commerce, Yukon Contractors Association, etc. These discussions are designed

- i) to ensure that Yukon businessmen are aware of the opportunities to participate in and benefit from the construction and operation of the proposed Alaska Highway pipeline project;
- ii) to ensure that the Foothills' purchasing policies reflect any special circumstances or needs of Yukon businessmen; and
- iii) to develop a bidders' list composed of potential Yukon suppliers of goods and services to the pipeline project. Foothills has issued the following policy statement on the role of local businesses in the construction phase:
 - (a) As a matter of policy, Foothills will encourage local entrepreneurship and will wherever practicable use Yukon firms to perform work. It will obtain its supplies and services including transportation from local businesses to the extent that supplies and services to residents will not be unduly inflated in cost or depleted in number.
 - (b) Foothills will locate its construction headquarters in Whitehorse where close contact can be maintained with northern companies and organizations.
 - (c) Contractors and sub-contractors on our project will also be required to purchase from local business wherever practical and where there will be no adverse effects on community supplies or services.
 - (d) Foothills will identify the business opportunities which are potentially available to the local businessmen in light of their capabilities and desires. The local Chambers of Commerce and other business organizations will play an important role in this identification of opportunities.
 - (e) Whenever practical, contracts will be made available by Foothills in proportions which will be manageable by small local firms.
 - (f) Whenever possible, a greater than normal lead time with regards to bidding on contracts will be provided the local businessman (Exhibit 5, *Socio-Economic Policies and Undertakings*, pp. 14-15).

The schedules and timing of the project will be of the utmost importance to business participation in it. A long lead time, before construction begins, will be of greatest benefit to small businesses, for it will enable them to make long-term plans for expansion, training new employees, and stocking inventory. New businesses can be established during this period, thereby increasing the capacity of the Yukon economy. Capital investments that require a long time to process, deliver, and install can also be carefully planned.

Timing will also prove to be a key element in helping to control the inflationary pressures, which will be more intense the more rapid the build-up of men and

materials. The distribution of activities over a longer preconstruction period will lessen the demands on local business and manpower. Such a distribution would also lead to more efficient use of the capacity of existing businesses and lengthen the pay-out period for their increased facilities.

To benefit from the project and to limit its detrimental inflationary effects, local businesses will be dependent on the Applicant's willingness and ability to establish procedures designed to facilitate their participation. Thus far, the Applicant, although acknowledging the need for such arrangements, has made no specific commitment to implement them. We recommend that such a commitment be worked out in consultation with representatives of local businesses and industry and that this commitment be followed by the elaboration of a program for effective local participation.

Before considering the ways in which some sectors of the business community are likely to be affected by the project, it is useful to examine the probable impact on individual Yukoners of the economic activity induced by the project.

Local Inflation

Apprehension was expressed in almost every community about the expected inflation the pipeline construction will cause and its effects on individual Yukoners, especially because of higher prices for staple goods and services. In Dawson, Mr. S. Taylor expressed the general concerns that "just as in the gold rush days, when housing was at a premium, here today, pipeline influx will force housing prices up and the cost of real estate will skyrocket" (24-2987).

We know that prices in the Yukon are already high. Statistics Canada does not include any Yukon community in its consumer price surveys, and there have been no private surveys conducted on a regular basis. Certain limited evidence from the Food Prices Review Board suggests that food prices in the Yukon are from 20 to 40 per cent higher than in Edmonton or Vancouver (Exhibit 33, *Initial Environmental Evaluation of the Proposed Alaska Highway Gas Pipeline*, Vol. 1, p. 565).

A food price study released in July of this year by the Anti-Inflation Board showed that the weekly cost of groceries in Whitehorse was second only to Yellowknife among Canadian cities and was almost 30 per cent higher than the Canadian average (*Whitehorse Star*, July 22, 1977).

Many reasons are advanced to account for this difference in the price levels. High transportation costs owing to the low volume of sales and the distance from primary suppliers, high operating costs owing to high energy prices and rapid labour turnover, and lack of competitive pressures both among the southern wholesale suppliers and the northern retailers are a few of the important factors. The Yukon imports almost all of its food and virtually all of its manufactured products.

The high cost of living in the Yukon is somewhat mitigated by the generally higher incomes. The average income in the Yukon was higher than in any of the provinces in 1972, and we think this comparative status has been maintained up to the present. However, these data do not accurately reflect the situation of the whole Yukon population: high incomes are earned only by persons who participate exclusively in the wage economy. These incomes are averaged with the low incomes of persons who live in the traditional and mixed economies.

Concern at the community hearings centred on the condition of people with low incomes, for their incomes would not rise sufficiently to offset their loss of purchasing power that the pipeline project will cause, when induced inflation will complement the general inflation. Mrs. Shirley Lindstrom in Mayo considered the problem of individuals who are dependent on social assistance.

There will be opportunities for the local businesses. What kind of benefits will this offer people who are on fixed incomes? People who are old age pensioners, welfare recipients, people who have been hurt and can't work anymore? These are also the people who will have to try and survive when prices and everything in the stores and the hotels, the restaurants, the gas stations, go up. There are rises of prices now for the tourist season, but this will be worse and will last much longer than the summer months (23-2894-95).

The Applicant has recognized that there will be pressures to increase the price of goods, services, and wages, and it has proposed a number of policies, described above, to moderate these pressures. Foothills also believes that local businesses can realize certain economies of scale, during the construction period, with a higher volume of sales and more efficient use of capacity, a more rapid turnover of inventory, and the ability to operate year-round. Adapting an infrastructure that is designed to deal with a large influx of summer tourists to operate all year round would not only increase the capacity of the economy, it would also moderate inflationary tendencies. Many local businessmen supported this view and agreed that

the project could be managed without runaway inflation.

However, a number of parties questioned this optimism. Relying on the Alaskan pipeline experience, the Alaska Highway Pipeline Panel predicted a significant increase in the cost of living throughout the Yukon and significant wage increases that would not be uniform across the economy. Other witnesses supported this opinion. Pipeline construction will inevitably lead to high rates of inflation in the Yukon, and there will be large increases in demand as spending by the Applicant and by pipeline employees augments the demands of local Yukoners, who will also have higher incomes. As wages rise and labour turnover increases, businesses will confront higher operating costs. Foothills' policies and the more efficient use of an infrastructure designed to service tourists will have only a minor effect on moderating prices. The increased capacity of new businesses and increased business activity should also moderate inflation, but the sizeable increase in demand will more than offset any of these moderating effects.

Price increases will affect the Yukon business and labour communities unevenly. Persons living on fixed incomes will suffer special hardship. Persons living on pensions that are currently indexed to the national rate of inflation will suffer because the local rate of inflation will be much higher. Nor will all workers be able to earn wages high enough to protect themselves against the high local rate of inflation. Although the high wages resulting from overtime involved in pipeline construction work should cause a general increase in wages elsewhere in the Yukon, because other businesses will have to pay higher wages to retain their present staff and to avoid higher turnover rates, not all wages will rise by the same amount.

The experience in Alaska was that, although all sections of the labour force saw their income rise during the years of pipeline construction, the wages for almost 40 per cent of the labour force did not rise as rapidly as the rate of inflation. Government employees, office workers, and persons working in retail outlets, such as general merchandise, clothing, and food stores, and in service industries, such as hotels, were particularly affected. Unorganized workers, who could not bargain effectively to recover incomes eroded by inflation, were especially hard hit. By comparison, the number of workers employed by construction contractors increased by over 75 per cent, and their average incomes, after allowing for the effect of inflation, increased by over 50 per cent (Exhibit 33, *Initial Environmental Evaluation of the Proposed Alaska Highway Gas Pipeline*, Vol. 1, p. 575-76).

Individuals who live by a mixed or a land-based economy will also suffer disproportionately from inflation. It is unlikely that wages from seasonal employment and the returns from labour invested in traditional activities will rise at a rate to match the increases in the prices of food, clothing, housing, and services.

Because nearly all Yukon communities are supplied from Whitehorse, prices elsewhere will depend upon the prices there. But in the communities located along whichever route is chosen, there will be an intensified upward pressure on prices, as the local residents compete with construction workers and the Applicant for goods and services.

Recommendations

Compensation should be paid to people who do not participate directly in the benefits of construction, but who suffer from the inflation that it has induced. A system of compensatory payments, paid for out of tax revenues generated by the project, may be necessary to eliminate the adverse and discriminatory effects of inflation.

Supplementary payments to Yukoners receiving old-age pension payments, social assistance payments, and unemployment insurance compensation should be paid for out of this fund and tied to the inflation differential between the Yukon and the rest of Canada. These supplements should be available only to persons who are included in the definition of a Yukoner, as defined for purposes of preferential hiring (see Chapter 5).

It is recognized that the price of certain staple commodities or services should be controlled or subsidized. For example, in the section on social impact, we discuss the need to subsidize day care services for children. We therefore recommend that the Department of Indian Affairs and Northern Development undertake a study to identify groups other than those on fixed incomes whose incomes will not keep pace with pipeline-induced inflation, with a view to determining whether or not the prices of certain goods and services might be controlled or subsidized to offset the discriminatory impact of the inflation. It is recognized that supplementary payments to persons living on fixed incomes will not compensate everyone who may suffer from inflation induced by the project.

Statistics Canada should begin to include Yukon communities in the consumer price index. If practical, Yukon communities should have individual price indices separate from the Yukon index. Price movements, and therefore compensation, are likely to

vary across the Yukon, depending on the pipeline route that is selected. Indexing should begin at once to establish a data base for the construction period.

It is also recommended that the Yukon government should implement a rent-control program for residential premises as soon as possible. This program, which should not apply to new housing or to new rental accommodation, would, if combined with security of tenure, protect Yukon residents who were living here before pipeline construction began, while leaving rents payable by non-residents free to rise and thereby to function as a disincentive to in-migrants.

Impacts on Various Economic Sectors

Mining

In 1975, according to the Yukon Chamber of Mines, mineral production in the Yukon was worth some \$229 million. About 1,300 workers are directly employed in mining, and another 1,300 are engaged indirectly in secondary industries, such as transportation and services. Four major mines are now operating in the Yukon: asbestos at Clinton Creek, copper at Whitehorse, lead-zinc at Faro, and silver-lead at Elsa. The production of the Cyprus Anvil mine at Faro, together with the coal it uses from a small mine at Carmacks, is said to represent 40 per cent of the Yukon economy (45-6203). There are also placer mines operating on a seasonal basis in the Burwash Landing area. Mineral exploration, which declined in the early 1970s, has shown recent increases, reflecting rises in the price of many metals.

The future of these mining operations is uncertain. The reserves of three of them may be depleted by 1981, but the Faro mine will continue to produce, and there are five prospective mines that may begin production in the 1980s. One of these prospects is near Faro; the other four are in the Macmillan Pass area, northeast of the Tintina Trench (see Figure 7).

Although the Yukon Mine Operators Association has not actually opposed construction of the pipeline, it has refrained from supporting it, because the association does not anticipate any direct benefits to its members from it. Indeed, witnesses representing the mining industry emphasized the likelihood of adverse short-term effects to them. Mr. Jim Olk, Vice-President of the Cyprus Anvil Mine, drew attention to "labour scarcities, particularly in the skilled trades, and the disproportionate wages that might severely affect both the industry itself and the companies which provide goods and services to the industry" (45-6219). The mining industry also feared that its labour force would

be used as a reservoir for the labour demands of the pipeline project. Transportation costs in the Yukon are also likely to rise. The mining industry relies extensively on the Yukon road system to transport its products to Whitehorse, and road traffic will be slowed or disrupted during the construction period.

Because the mining industry must sell on the international market, it cannot pass on these increased costs. Rising costs, combined with early construction of the pipeline, could hasten the phasing out of the marginal mines mentioned above, and new mining developments will very likely be delayed to avoid competition with pipeline construction.

Mr. Vic Jutronich, speaking on a panel presented by the Yukon mining industry, gave a possible example of the effect of this competition.

Originally I was supposed to have somebody else with me, who represents one of the new mines coming into the Yukon. [If] the decision was left to me as an individual to get that mine going right now, I will delay it at least five to ten years. The reason being that, if they start construction now, and try and run it at the same time as a pipeline, they will not be able to compete. As I say, the feeling that I would have as an individual would be to delay that (48-6772).

Coordination between mining activities and the timing of the pipeline construction could even out the depressive impacts on the Yukon economy that otherwise would occur both at the time of the phasing out of some existing mines and when the pipeline is completed.

Despite some short-term problems that the pipeline will cause, some witnesses from the mining industry foresee some benefits from possible hydroelectric developments that would not only supply electricity to the pipeline but would also have sufficient excess power to provide electricity for new mines. Because the potential hydroelectric development sites and the new mines are both located in the vicinity of the Tintina Trench, the mining industry favours its use as a pipeline route. The infrastructure of towns and roads, which would be built during construction of the pipeline, would then be available to facilitate later mining development.

Mayor Rennie Mitchell, spokesman for the town of Faro, supported the Tintina Trench route and predicted that the "pipeline project could provide the energy and transportation infrastructure that is required as a stimulant for subsequent development of new mining projects" (45-6204). The underlying assumption here is that the pipeline would provide a sufficient demand to support new hydroelectric development in the region.

This assumption is discussed in more detail later in this chapter, but preliminary analysis suggests that the anticipated benefit is unlikely to be realized.

Tourism

Although tourism has levelled off in recent years, it continues to provide a high level of seasonal employment. Over 300,000 visitors spend about \$25 million in the Yukon annually. Because tourism is highly dependent on the Yukon's network of roads, and particularly on the Alaska Highway, it appears likely to suffer during the construction phase of the pipeline. The Government of Yukon, in its submission to the Inquiry, outlined several of the short-term and long-term consequences of the pipeline on the tourist industry.

Conflicts are likely in the utilization of accommodation, transportation and food services, and any monopolization of these services by the pipeline would be to the detriment of the tourism industry on both an immediate and a wider basis. Off-season utilization of facilities by the pipeline would be an offsetting factor to some extent.

Availability of labour for the tourism industry is a key concern in view of the potential wage gap and the seasonal nature of the industry. Tourist highway traffic could be disrupted by pipeline traffic, road closures and construction activity. The in-migration of job-seekers and other transients would have negative effects on traditional visitor traffic.

A pipeline may affect tourist attractions and delay tourist developments adjacent to the highway route. Negative publicity concerning the pipeline, as occurred in Alaska, could be devastating for tourism and effective public information programs must be in place for the proposed project (Exhibit 131, *A Submission of the Government of Yukon to the Alaska Highway Pipeline Inquiry, July, 1977*, p. 41).

In response to questions, however, Commissioner Pearson gave his opinion that during the construction of the pipeline there would be no decline in revenues to operators of establishments who cater to the tourist trade. The ambivalence demonstrated by these views reflects the uncertainties of attempting to analyze the pipeline's impact on different sectors of the economy. Although inconvenience and unfavourable publicity may deter many tourists from visiting the Yukon during the construction period, there may be sufficient revenue from business associated with the pipeline to permit hotels, motels and restaurants to recover their losses. Another concern is that, as a consequence of local inflation, the competitive position of the tourist industry will deteriorate during the construction phase and may have difficulty recovering after it ends.

Because the Alaska Highway is already the Yukon's major corridor for tourism, construction of a pipeline along the Alaska Highway would lead to the greatest likelihood of conflict between the pipeline and the tourist industry. Selection of another route, although less likely to affect traffic bound for Alaska, would have a major impact on Dawson, one of the most popular tourist attractions in the Yukon. Not only would construction in the Dawson area conflict with tourism, but also if the city became a major supply centre, its character might be altered. As Ms. Susan Hellman of Dawson asked,

What will happen to the tourist industry when demand for land outweighs the desire to preserve historic buildings, and as has already happened in Whitehorse? These buildings are destroyed to make way for office buildings and housing (26-3143).

Transportation

The Yukon's unpaved all-weather network of roads connects every Yukon community with the exception of Old Crow. Although much of the road system was built specifically to serve the mining industry, its existence has made the Yukon more accessible to all forms of development as well as to tourism. Most Yukon communities also have the benefit of regular air service.

Three principal land routes carry goods to and from the Yukon: the Alaska Highway; the Haines Road from Haines, Alaska, to the Alaska Highway at Haines Junction, Yukon; and the White Pass & Yukon Railway, which runs from Skagway, Alaska, to Whitehorse. Foothills plans to use all three routes to transport materials to staging areas for pipeline construction. In addition, it is expected that a Skagway-Carcross-Whitehorse road, now under construction, will be open before 1980.

As the Yukon's major transportation centre, Whitehorse would become the major supply and staging depot regardless of the route that is selected, and, as the Yukon's principal transportation artery, the Alaska Highway will become the principal highway used by the applicant and others.

If a route within the Tintina Trench is selected, a haul road would have to be built along a portion of the route, and it would probably increase the importance of Watson Lake as a supply centre. Selection of a route other than the Alaska Highway would have little effect on the nature of the demands placed on Whitehorse, although the impact on the different sections of the Alaska Highway will vary significantly with the choice of route.

Because construction of sections of the Canadian portion of the pipeline through British Columbia and Alberta might tax to capacity the transportation industry in those provinces, there may be no idle or surplus rigs or rolling stock to be diverted to the Yukon to meet the expanded demand. Consequently, the Yukon transportation industry may also be used to its capacity. Both the Yukon Transportation Association and the White Pass & Yukon Railway have stated that, if a pipeline is built across the southern Yukon, transportation firms will have to lay out considerable capital to equip themselves for the demands of the project. The representative of the railway testified that it would take the opportunity to invest in new rolling stock to replace the existing stock (9-1457). If the Yukon transportation system expands to serve the pipeline as well as present customers, there is likely to be excess capacity for transportation in the project's aftermath. In addition, it appears that some of this increase in capacity would be for special kinds of equipment that may not be transferable to the servicing of other customers after the pipeline construction is completed (9-1455-58). The degree of expansion that would be required could be reduced somewhat by a long lead time, which would permit transporting considerable materials into the Yukon before construction began. The longer the lead time, the greater the quantity of material that could be stockpiled. More efficient use of present rolling stock would diminish the need for heavy capital outlays and of long-term excess capacity.

The Yukon is served by a major airport at Whitehorse and by smaller airports located in almost every community. Foothills intends to make extensive use of these airports for the transport of men and materials. With the exception of the airport at Whitehorse, the other facilities are not, at present, capable of handling increased traffic or larger planes. The Government of Yukon is considering making small parcels of land available to Foothills in exchange for the erection of the passenger and freight receiving facilities that will be needed on them.

If the Alaska Highway route is chosen, more than \$2 million will be required to upgrade airports at Beaver Creek, Burwash Landing, Haines Junction, and Teslin. If any other route is chosen, similar upgrading of different airports will be required. If either the Klondike Highway route or the Tintina Trench route is chosen, Dawson will become a prime staging point, and its present facilities will require extensive renovations.

66 The Applicant has not made arrangements for the use of chartered or scheduled aircraft for its transportation

needs, although it has stated that it intends to use chartered aircraft during periods of large-scale personnel movements (Exhibit 3, *Application of Foothills (Yukon)*, Vol. 5A, p. 5.27). Consultation with airlines that service the Yukon to determine their capabilities for future needs is therefore essential. If it appears that, at certain times of the year, or in certain areas of the Yukon, existing services would deteriorate with the additional business related to the pipeline, then the Applicant should be required to rely on chartered aircraft.

Retailers and Small Businesses

During construction of the pipeline, extraordinary demands will be placed on such services as banks, insurance companies, hotels, motels, and retail stores by pipeline personnel and in-migrants. Most small businesses look forward to servicing the pipeline. Mr. Graham Kelly of Mayo expressed a common sentiment of the small business community. "I would definitely like to see a pipeline go through the Yukon, as I'm sure it would help all the small faltering businesses up here" (23-2825). This increased business may well recoup any losses suffered through a decline in tourism.

Planning is required to enable small businesses to overcome problems caused by staff turnover and tendencies to overcapitalize. In addition, small businessmen feared that the size of Foothills' expenditures would make participation by small local businesses impractical. This feeling was stated by Mr. Mike Williams in Destruction Bay. "Well, I think what they mean is that they will be dealing directly with the wholesalers, not the small businessmen. This is not practical, price-wise, to deal with the local businessman – the small businessman" (11-1815). By following its proposed policies for local business participation, Foothills can do much to involve small businesses in the project.

Construction and Housing

The increase of population, and pressures related to development in the Yukon, have led to substantial construction related to mines and hydroelectric stations, as well as to residential, administrative, and commercial buildings. Rising land and building values have accompanied this activity. Evidence from Foothills indicates that 90-odd construction or contracting firms in the Yukon were active during the past construction season (Exhibit 3, *Application of Foothills (Yukon)*, Vol. 5A-4. 23).

Concern was raised that the pipeline project, which will occur at the same time as the repaving of the Haines

Road and the northern portion of the Alaska Highway, would result in the construction industry operating at full capacity. The Government of Yukon announced that, as a matter of policy, it would not initiate any major construction projects in this period.

Despite overall expansion of the economy, the current apartment vacancy rate in Whitehorse is upwards of 20 per cent (48-6797). Although this situation might appear to solve at least part of the problem of absorbing large numbers of in-migrants and of avoiding speculation in real estate, the vacancy rate is highly seasonal, and there is, unfortunately, little accommodation of the type required by in-migrants. Most empty apartments are unfurnished, and the ability of existing housing to accommodate large numbers of newcomers is questionable. The Whitehorse Home Builders Association made a number of proposals to enable local businesses to participate in the construction of homes that will be required by personnel associated with the project, while ameliorating the strain on the local home building industry during the period of pipeline construction. They included proposals that the buildings should be tendered in groups of five units or less and that adequate notice should be given prior to the need for the housing to ensure that materials are available at regular prices.

Communications

Pipeline construction activities will pose special problems for the communications system; and the demand for new telephones, long-distance connections, and more sophisticated equipment will tax the existing system. During construction of the Alyeska pipeline, the telephone company suffered a severe shortage of manpower and equipment; complaints about its service increased by two-thirds in a one-year period, May 1974 to May 1975 (Exhibit 51, *Pipeline Impact Information Centre Report Number 20*, p. 5).

Considerable capital investment will be required to enable the communication system to cope with the demands placed on it. Canadian National Telecommunications has indicated to the Applicant that it can provide a communication system to handle the project's needs. The cost of such a system should be amortized in such a way, perhaps by making the Applicant pay special rates during the construction period, that Yukon residents during the postconstruction period do not bear the cost of a system built especially for the Applicant.

The Land-Based Economy and the Mixed Economy

The introduction to this chapter mentioned the fact that a significant, though unknown, number of Yukoners participate in an economic life in which wage employment is not the sole or even the principal means of providing for one's existence. One of these economies can be described as the land-based economy; its participants combine seasonal or part-time wage employment with subsistence-style pursuits. There is a pressing need for statistical information about the number of participants and about the value of activities in these economies to evaluate their significance in the total Yukon economy.

Frequent comments were made at the community hearings about the potentially disruptive effect of the pipeline on those pursuing traditional activities. Mrs. Lily Fox of Teslin stated, through an interpreter, her impression of the pipeline, based on her experience with the Alaska Highway.

She (Mrs. Fox) says it's going to be harder to get our natural foods that we live off of, because it's going to be partly destroyed. What isn't destroyed will be chased away (19-2466-67).

The construction activity and the influx of construction workers was seen as a threat to the hunting and fishing on which many people depend for all, or a significant part, of their subsistence.

Concern was also expressed by trappers who feared that game would be disturbed by pipeline activity. Mr. Clyde Blackjack of Carmacks described the situation that he anticipated would be facing him as a trapper.

When I go back out in the bush myself to trap, I'll find out that all my games are gone. Probably be driven away or be big clearing two hundred feet by something going over my trapline there. I set my trap, I don't kill nothing (28-3301).

This fear was repeated in evidence from other trappers.

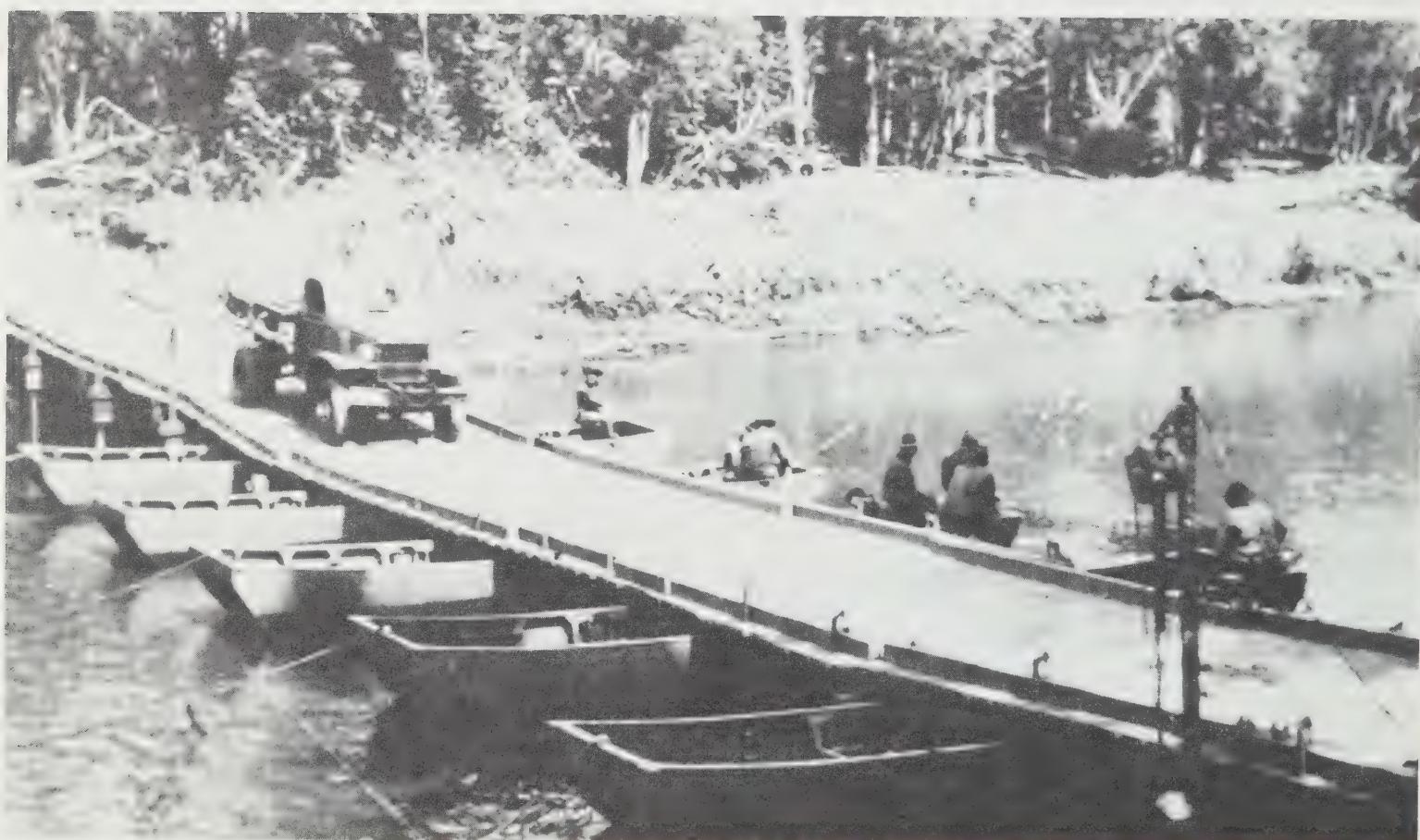
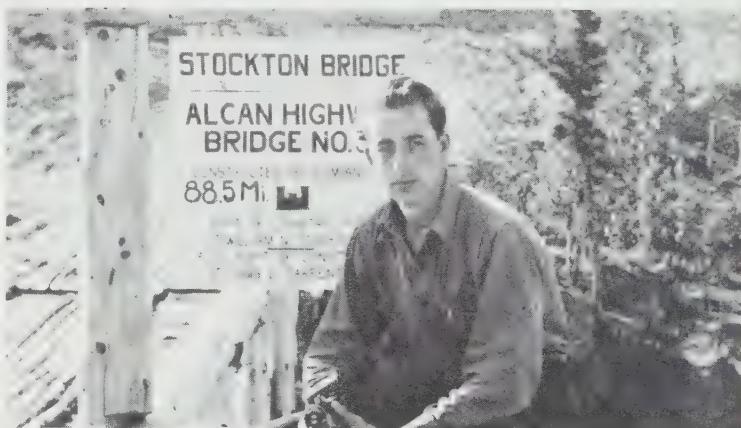
There is likely to be a significant adverse effect on the people whose existence is dependent on the land. The effect of inflation has been discussed earlier. In addition, competition for renewable resources, such as game and fish, will come from pipeline workers and from the increased population. The construction activity will also drive the game away from the construction areas. In economic terms, the cumulative effect will be to increase the costs of engaging in land-based activities – more labour to obtain the same catch will have to be spent than was invested prior to

Men at work building the Alaska Highway (Yukon Archives)

A pontoon bridge built along the Alaska Highway during World War II (Yukon Archives)

Alaska Highway construction, 1942 (Yukon Archives)

Stockton bridge on the Alaska Highway shortly after construction (Yukon Archives)



construction. The effects of inflation and the disruption of land-based activities will have both an economic and a social cost to participants in these economies, whose major offsetting benefit lies with the opportunity for employment.

Chapter 5 has discussed the means whereby jobs can be found, and has also discussed possible variations in work arrangements to allow these people not only to work on the project but also to continue to pursue their land-based activities. The Applicant's proposal promises to produce more wage employment, both full-time and part-time, and this employment will be available to people who currently participate in the mixed or land-based economy. The higher wage levels should also make wage employment financially more attractive.

Although more work at higher wages may be available during the construction period, whether or not this attraction will be reflected in large movements to the wage economy cannot be predicted. As suggested in Chapter 7, non-economic factors represent unquantifiable – but significant – variables in determining employment patterns in the Yukon. If the economic motivation for wage employment for people in the non-wage economies is merely to acquire money for the purchase of essential products that cannot be obtained from the land, then it is possible that no significant movement to wage employment will occur because of the higher wages.

The Applicant is engaged in discussions to minimize the impact of the project on trappers. The Applicant also has a policy with respect to compensation for the damage suffered by the trappers, as elaborated by Mr. John Burrell.

... we will work with the Trappers Association to develop a procedure by which compensation can be paid to the trappers, if there is any damage that results from our project, whether it be in the construction phase or in the operational phase.

In addition to that, we would take the advice of the Band Council, or the Trappers Association, as to what the compensation should be, if, in fact, there is damages caused by our project.

We will take their advice and, based upon that advice, that will be the compensation that is paid.

Now, another concern with respect to compensation is the length of time it takes to make the compensation payment. In many cases, it takes some time, and so, as a result of that, we have said that we will make payment on compensation no later than a month following the time at which the claim is made (19-2441).

As stated below, it is recommended that this policy be adopted. Disruption in the land-based and mixed

economies must be minimized. One means is to discourage competition for game that may arise from the activities of pipeline workers and other in-migrants by applying gun controls vigorously and by lengthening to more than six months the residency requirement for the issuance of a resident's hunting permit.

Local Entrepreneurship

This period of increased economic activity in the Yukon will offer an opportune time for establishing new local businesses to provide goods and services, such as right-of-way clearing, trucking, and gravel supply to the pipeline project and related developments. Measures must be taken, however, to ensure that these new businesses are viable economic entities that can operate successfully after the project is completed.

The President of Foothills testified concerning the experience of Alberta Gas Trunk Line in accommodating new businesses during the construction of other pipelines in western Canada. As an example, he discussed an arrangement Alberta Gas Trunk Line had made with an Indian right-of-way clearing crew in Alberta, where the crew had been given a commitment of five years' work, a period long enough to enable the crew to pay off the capital cost of the equipment it had purchased (46-6377).

The cooperation of the Applicant should be obtained so these companies will be placed on the bidders' list, which is proposed for local businesses, and so that orders will be forthcoming. The new businesses will also face the same problems that face existing businesses in planning size and growth so they do not overcapitalize during the project. Education of the new entrepreneurs, and the cooperation of Foothills, will be needed to ensure that this does not occur. In the Applicant's opinion, overcapitalization is a common problem that has been experienced elsewhere and can be handled by careful planning.

There is also an opportunity for different structures of business enterprises to be investigated and encouraged. As an example, at present in the Yukon, the coal mine at Carmacks operates with a very flexible community work force. Other arrangements could include contracts which might be granted to groups of individuals to supply services that might otherwise be supplied by companies. This arrangement would enable broader participation by people who are committed to a mixed or land-based economy, and whose work tendencies may not be compatible with the pipeline working conditions as established in collective agreements. This possibility, as it relates to

employment on the pipeline, is investigated more fully in Chapter 5.

Sufficient seed money must be provided for these businesses. The Yukon Heritage Fund, described in Chapter 11, might provide loans to Yukoners who wish to undertake entrepreneurial activities and capitalize on the opportunities created by the pipeline project. In this way the Heritage Fund might invest a limited portion of its capital to enter into a partnership with Yukoners as the project proceeds. These loans might be of substantially higher risk than loans that would ordinarily be acceptable to traditional financial institutions. However, through careful evaluation and control, the fund should be able to make a useful contribution to the Yukon's economy without jeopardizing its capital.

Compensation

Many persons at our hearings expressed concern that the building and the operation of the pipeline would cause physical damage to their property or economic damage to their activities. Reduced yields from trap lines crossed by the pipeline was a commonly cited example. Reduced hunting opportunities or damage to private business operations, such as business lost at lodges along the Alaska Highway, was also mentioned. It is reasonable to expect that with an operation of the size envisaged by Foothills, there will be numerous occurrences of this sort, where the project causes specific loss or measurable economic damage.

In these circumstances, it seems both unwise and unfair to require persons who have suffered damage to resort to the usual court processes to seek compensation. The courts would soon become overloaded, and the resulting delay would increase social tension. There is clearly a need for new mechanisms to resolve such disputes. Everyone is in accord on this point. Foothills itself, for example, has suggested that new procedures should be set up, particularly with respect to trap lines. In our view, this approach should be generalized to provide for expeditious settlement of all claims based on specific damage to individuals or groups.

The process we envisage should have a number of principles embodied in its procedures:

(a) It should be independent, with the capacity to impose decisions binding on the individuals and the Applicant alike.

- (b) The details of the procedures should be determined only after consultation with and on the advice of the communities they will serve.
- (c) The procedures should work expeditiously and with a minimum of formality. The decisions reached should be effective immediately. If it is determined that the pipeline company owes money as compensation for damages, the necessary funds should be made available without delay. Foothills has agreed to this principle and has indicated that, with respect to trap lines, it would be prepared to pay any settlement within 30 days.
- (d) The procedures should result in compensation to be paid by Foothills whenever an individual or a group suffers a specific and quantifiable loss that is reasonably traced to the pipeline project. This principle would include damage caused not only by Foothills itself, but also by its employees, contractors, and subcontractors.
- (e) When an individual feels that he has suffered damage caused by the pipeline project, he should have the right to lodge a claim under these procedures. It should then be up to the Applicant to show that the claim is not valid.

In our view, procedures that embody these principles must be available and in place well before the commencement of construction. Only in this way can the build-up of activity that will precede the actual laying of pipe, and the construction phase that will follow, be provided with this necessary safety valve.

Government Revenues and Expenditures

Introduction

The adverse economic effects of the pipeline project on the Yukon have been discussed elsewhere in this chapter, and the adverse social effects will be discussed in Chapter 7. Each level of government will require funds to plan and act to minimize the negative impacts of the project. For example, increased demand on local health services will be one of the specific social impacts; funding must, therefore, be made available to the government to increase the capacity of local health facilities. The housing construction induced by an increased population will necessitate an expansion of territorial and municipal services; funding must, therefore, be found to enable the government to finance these services.

These effects will exist not only during the pipeline construction, they will be felt for many years, long after the construction period is over. Capital expenditures, incurred at this time by the Government of Yukon, must be paid for from tax revenues during the postconstruction years. Similarly, the social costs of caring for the needs of individual Yukoners who will suffer from the pipeline are costs that will not end when the construction crews leave. Taxes must be imposed that will be a continuous source of revenue to cover these costs, as well as the proportionate share of the cost of government, which the pipeline, like all real property, should bear.

Two issues should be mentioned, but we shall not attempt to discuss them in any detail in this section. The first relates to the project's impact on the federal government's expenditures and revenues in the Yukon. These expenditures will increase significantly because the federal government plays a major role in the Yukon. Significant revenue will accrue to the federal government in the form of personal income taxes from workers and from corporate taxes from Foothills. The federal government should also derive revenues from leases of the right-of-way. However, this is a study of the impact on the Yukon; as it relates to the public sector, the study will limit itself to the Government of Yukon. The net effect on the federal government revenues and expenditures will not be analyzed in this study.

The second problem relates to the mismatch of revenues and expenditures. As the Alaskan experience demonstrated, significant government costs are incurred both before and during the construction period. However, government revenues do not appear until during and after construction. Therefore it may be necessary to devise a scheme whereby tax payments from Foothills can be advanced to the Government of Yukon during the preconstruction period to offset pipeline-related costs at that time. In addition, short-term loans could be made by the Heritage Fund (described in Chapter 11) to the Government of Yukon. It is not possible at this time to estimate accurately the government expenditures or the government revenues from the project, nor is it possible to determine the timing of these expenditures or revenues. The Government of Yukon, in consultation with the regulatory agency described in Chapter 10, and drawing upon information collected by the impact information centre described in Chapter 7, should be able to assess more accurately what the short-fall of revenues will be and when it will occur. The possibility of a Foothills prepayment could be investigated at that time.

Role of Public Sector

The role of the government as employer and consumer in the Yukon has steadily increased in the past decade, and most of the population and income growth in Yukon in the 1970s can be attributed to the increased role played by all levels of government.

The public sector is now the major employer in the Yukon economy. The three levels of government – federal, territorial and local – employ more than 3,000 persons in the Yukon, almost one-third of the Yukon labour force. Government expenditures in the Yukon are expected to total more than \$115 million in 1976-77. The inevitable result of the pipeline project will be to increase the relative position of the government as ever more government employees and ever more government expenditures are required to cope with the effects of the pipeline. The following discussion of the roles of the three levels of government in the Yukon will aid the assessment of this impact.

The Government Structure

The Government of Yukon

The division of powers between the federal, territorial, and local governments in the Yukon is very complex, and it has been described to some extent in Chapter 2. There we discussed the differences between the powers of the Government of Yukon and those of provincial governments, and we mentioned the growing public demand for more self-government. Here we shall discuss how the division of powers affects the revenues and expenditures of the Government of Yukon and of local governments.

During the fiscal year 1975-76, the government of Yukon had an operating budget of \$45 million and an additional \$25 million was spent on capital projects. The Yukon budget, although it is passed by the Yukon legislature, must first be approved by the Department of Indian Affairs and Northern Development. During the fiscal year 1975-76, the major expenditures of the Yukon government were incurred in the areas of highway maintenance, public works, education, and health, welfare and rehabilitation, areas that accounted for almost 75 per cent of the budget. Significant sums of money were also spent to support local government and to promote tourism and the distribution of information.

Revenue generated by the Government of Yukon from such sources as taxes on property, liquor and

cigarettes, liquor-control profits, and licences amounted to approximately \$13 million; a federal grant, which is made to the Yukon in lieu of a Yukon income tax, amounted to approximately \$6.6 million. In accordance with cost sharing agreements with the federal government, the Government of Yukon recovered approximately \$17.7 million. The financing of the remainder of the budget came from capital and amortization recoveries, a capital grant of \$13.1 million, and an operating grant from the federal government. The federal government makes a capital grant to cover all capital expenditures of the Government of Yukon.

Federal Government

The federal government plays a more important role in the Yukon than it does in the provinces because of its political relation with the Yukon.

In September 1976, there were approximately 1,200 employees of the federal government and crown agencies in the Yukon (5-5A-4.46). The majority of these employees worked for the Departments of Health and Welfare, Indian Affairs and Northern Development, Public Works, and Transport, and for crown corporations and federal agencies, such as Canadian National Telecommunications, the RCMP, which provides police protection, and the Northern Canada Power Commission, which is responsible for the generation, transmission, and distribution of most electrical energy in the Yukon. Direct federal government expenditures for the fiscal year 1976-77 are projected to be more than \$50 million, although this amount can be only approximated because of the number of departments, agencies, and crown corporations involved.

There is a great deal of joint Yukon and federal responsibility. For example, although health is listed as a Yukon responsibility, and the Yukon has its own hospitalization plan, its hospitals and other health facilities are operated by the federal Department of Health and Welfare. Similarly, although highways appear in the Yukon's budget, the Government of Yukon is responsible only for their maintenance. Decisions on other highway matters, such as construction, are the responsibility of the Department of Indian Affairs and Northern Development.

Local Government

There are only three municipalities in the Yukon, the cities of Whitehorse and Dawson, and the town of Faro.

Only the Government of Yukon and these three municipalities are empowered to levy a general property tax and a school tax. Four communities, Mayo, Teslin, Haines Junction, and Watson Lake, are local improvement districts. Most other Yukoners live in what are termed unorganized communities, in which the Yukon government administers zoning regulations, sewage system planning, and community development. A member of the Executive Committee of the Government of Yukon is responsible for local government.

Revenue and Expenditure Estimates

The Applicant submitted estimates of projected government expenditures and revenues that would be associated with the pipeline project, and it concluded that the existing tax structure was adequate to compensate the Government of Yukon for the increased expenditures that would arise from increased demands on government services. The Applicant's opinion was that pipeline-induced revenues would exceed pipeline-induced expenditures by between \$5 million and \$7 million during the years of construction. In the first three years of operation, this net gain would be \$3.9 million annually, but in succeeding years, when the Applicant began to show a profit, the net gain would climb to over \$12 million (E63-Miller, p. 7).

The Yukon Government was considerably less optimistic about this net gain, during both the construction phase and the operating phase. It forecast a net gain of \$200 thousand in the last year of construction, and approximately \$6.5 million annually during the operating phase of the pipeline (E131, p. 45).

These estimates of net gain were based on forecasts of additional government expenditures and on revenues from the taxes, licences, and liquor-control profits mentioned above that would be generated by the pipeline project. Both the Government of Yukon and the Applicant forecast that the federal government grant in lieu of income taxes would increase. The Yukon government included revenue from a tax on the gas used to power the pipeline compressor stations, a tax that has not yet been passed, but which the government anticipated would be passed. For estimation purposes, it was set at a rate equivalent to that in British Columbia. Both of them included estimates from a property tax on the pipeline and related facilities. The Yukon government assumed that

there would be a one-year delay between the assessment of the property and the levying of the tax, so that property tax revenues would appear one year later than Foothills had predicted (E-131, p. 23).

Projections of increased expenditures must be treated with great caution and, indeed, no conclusions on their magnitude can be based on the evidence presented. The Applicant's estimates were prepared without consultation with the Yukon government or with its various departments, and they were criticized in the Government of Yukon's presentation to the Board. The Applicant assumed there was excess capacity in virtually every government department, and it failed to consider some departments that the Government of Yukon concluded would be affected by the proposed project.

Estimates provided by the Government of Yukon were much more comprehensive than the Applicant's, but they were also incomplete and were calculated on the basis of a number of questionable assumptions. For example, the Commissioner testified that his government was "using the most optimistic figures of minimal in-migration and we state throughout that we are being conservative in terms of our statements" (45-5000). The optimistic figures of in-migration were also the Applicant's estimates, and increased in-migration above these very low estimates will have a significant effect on the government's cost estimates and planning.

The effects of inflation and higher wages were not analyzed, although the Yukon government did agree that inflation could wipe out any gains to the public sector (E131 - p. 46). Certain costs, such as the cost of a rent control program and the additional costs to the Yukon Housing Corporation, were not included. Other costs that would be dependent on the route selected could not be included, such as capital expenditures for Dawson.

Before a conclusion can be drawn that pipeline-generated public revenues will be greater than the increased costs attributable to the pipeline, a more detailed analysis of the effect of the pipeline on government expenditures and revenues is required. A number of variables will affect both expenditures and revenues. These variables amount to a substantial risk factor for the Yukon government, a risk factor that must be taken into account in determining a fair tax structure. Should the existing tax system not prove adequate, then amendments to this system must be considered to ensure that expenditures for the public sector that are induced by the project are not borne by Yukoners.

Analysis of Taxes

General

The construction and operation of a pipeline through the Yukon will have a considerable impact on the public sector, an impact that will be reflected during all phases of the project in increased costs and in the manpower that will be required to maintain the existing standards of government service. These costs will be incurred in all communities, but they will vary significantly among the communities.

From the point of view of Yukoners, it is important that the present capacity of the Yukon infrastructure and the Applicant's anticipated demands on it be determined early, with as much precision as possible. The precise determination of these demands is not yet possible because they are dependent on a number of unknown variables, such as the selection of a route, the extent of in-migration, the success of the Applicant's plan to isolate the construction camps, and the degree of inflation. Some of the variables will be determined prior to construction. The effect of others will be measurable only during or after the period of construction.

An examination of the tax system reveals that, as the Government of Yukon stated in its evidence, "Yukon's existing tax structure is a partial and incomplete system when compared to the Provinces" (E131-29). The Yukon has neither a sales tax nor an income tax, although the Income Tax Act (Canada) provides that 30 per cent of the federal income tax payable by Yukon residents, and ten per cent of the taxable income earned by a corporation in the Yukon, is to be returned to the Yukon in the form of a grant.

An important problem for the legislative assembly arises from the historical dependency of the Yukon government on the federal government. In the words of the Government of Yukon:

...a considerable portion of government expenditures are met by an annual operating grant from the federal government and in practice any net gains through pipeline construction and operation would go towards reducing the deficit grant from the federal government. Pipeline development would enable the Yukon government to meet a greater proportion of its operating and maintenance expenditures but the ultimate beneficiary would be the Government of Canada in the form of reduced operating grant payments to Yukon (E131-22).

Later evidence indicated that any increased revenue would not necessarily be completely offset by a decreased operating grant, because this grant is

negotiated on a yearly basis between the Government of Yukon and the federal government. In any event, the Government of Yukon attaches political significance to the ability of the Yukon to generate more revenue from its own taxation system, thereby becoming more independent of the federal government (45-6165).

Sales Tax

The Government of Yukon also discussed the revenue potential of a sales tax. Although a sales tax would collect revenue from pipeline-related transactions, it would also affect a much broader range of transactions. It would be proportionately more of a burden to persons earning low incomes, and it is these people who will be placed in the most precarious economic position by the pipeline project. The burden of a sales tax after the construction period would fall on Yukon residents and tourists. It would be inflationary at a time when there would be other significant inflationary pressures in the economy. Moreover, a sales tax would require significant administrative attention at a time when neither government nor business will have the capacity to undertake additional administrative overhead.

It is not apparent that the sales tax would generate significant revenue. We recommend that this tax should not be implemented to generate revenue to cover pipeline-related costs.

Property Tax

By far the most important potential source of long-term revenue from the Applicant's project for the Government of Yukon and its citizens is the application of the local property tax to the pipeline. This tax would enable the government to obtain a certain flow of income for a long time and would be a very significant long-term benefit from the pipeline.

The Government of Yukon has made forecasts of revenue from a property tax on the pipeline and other property of the Applicant. These revenues were calculated from the current Taxation Ordinance in the following manner. The Ordinance contains a schedule of assessed values for pipelines of 46-inch diameter or less, but it does not assess 48-inch pipelines. The Government extrapolated from the schedule to obtain an assessment for a 48-inch pipeline, then stated that this assessment would be reduced by 42 per cent. The reason given for this reduction was to bring the assessment in line with the Alberta Assessment Manual. The Yukon mill rate was then applied to this reduced assessed value.

There is no statutory requirement for taxation in the Yukon to be equivalent to that in Alberta. Indeed, there

is no compelling reason for valuing the pipeline in such a fashion. The pipeline will cause far greater dislocations and inconveniences to people and institutions of the Yukon than are caused by construction and operation of pipelines in Alberta or elsewhere.

Elsewhere in Canada, pipelines are a minor part of a package that brings a variety of benefits to the provincial government and citizens in question. For example, the Government of Alberta derives substantial revenues from gas production and from the numerous industries associated with and triggered by the plentiful supply of low-cost gas. Many long-term jobs are related to the gas industry. In provinces such as Ontario, the gas conveyed through pipelines is consumed by its industry and citizens. But the Yukon will get nothing but a large pipeline. Yukoners will suffer great social and economic impacts during its construction stage, and they will receive little by way of long-term benefits from the pipeline. Taxation policy should be structured to reflect this reality.

A number of methods, and combinations of methods, are currently applied by authorities to determine the assessed value of property. Three of these methods are the cost of the property (or of the production of the property), the market value of the property, or the productive (economic) value of the property. Because a pipeline has no easily determinable market value, given its integrated nature, and because the productive value of a pipeline in the tightly regulated gas-transmission industry is essentially a function of the cost of construction, a valuation that reflected the cost of constructing the Foothills pipeline might be a suitable approximation of the economic value of the pipeline. A valid method of assessing the Foothills pipeline for property tax purposes would be a taxation value based on the cost of its production, which, in the case of a pipeline, is the cost of construction.

This is the approach that the Alaska State Government adopted in its evaluation of the Alyeska pipeline for property tax purposes. It is also, apparently, the approach that will be taken in an evaluation of the Alaskan section of the natural gas pipeline. During construction of the Alyeska pipeline and its related facilities, on January 1 of each year, the up-to-date costs of construction (e.g., pipeline in ground, inventory, haul roads) were calculated. A property tax of 20 mills was then assessed against this "full and true" value. As a result, sizeable property taxes were obtained during the construction period, even before the pipeline was in operation. The State of Alaska received property tax revenues of approximately \$3.3 million in 1974, \$13.9 million in 1975, \$68.3 million in 1976, and \$125 million in 1977. In 1977, the revenues

attributable to the pipeline portion alone were approximately \$100,000 per mile of pipeline.

On January 1, 1978, the taxable value of the Alyeska pipeline will be reassessed on the basis of the "economic value" of the pipeline and its related facilities. Although this value has not yet been determined preliminary indications are that this value will not be less than the costs of production, which for 1977 were estimated to be in excess of \$5 million per mile.

This is one compelling reason for not applying assessment techniques used in other Canadian jurisdictions to a large pipeline in the Yukon. Taxing the pipeline at a rate less than the rate at which Alaska will probably be taxing the same pipeline can only result in an undue tax saving by the Applicant and, ultimately, by the American consumer. No benefit will go to the Yukon resident from a preferential tax treatment of a pipeline that primarily serves non-Yukon consumers.

A number of other considerations must also be taken into account when the assessment of a pipeline is undertaken. The method must be relatively clear and simple to apply; the valuation must be fair and equitable, both with respect to other pipelines and to other properties and, the evaluation must be kept up-to-date and current. Improvements to land and buildings are presently assessed in the Yukon on the basis of the Alberta Assessment Manual (1963). As a rule of thumb, the assessed value usually amounts to slightly less than 30 per cent of the actual replacement cost in the Yukon. A method of taxation that assessed the Foothills pipeline at that level and taxed the pipeline at the same rate as other property in the Yukon would be an equitable system of taxation, particularly in light of the burdens, both present and future, that the Applicant's proposal will impose on the Yukon.

By assessing the pipeline at 30 per cent of its "actual value" (its cost of construction), the Government of Yukon could collect a tax of approximately \$11 million, based on current mill rates and on the assumption that the pipeline will follow the Alaska Highway. These tax revenues per mile of pipeline are less than three-quarters of the revenues per mile that will accrue to the Alaska State Government from property taxes on the Alaskan section of the pipeline.

Because either a longer route or cost overruns would result in significantly greater strains on the Yukon infrastructure, and therefore significantly greater impacts on the Yukon people, a tax whose yield will rise as those variables change, is a proper tax. In a like manner, if the Applicant achieves cost-savings, then

the impact should be less, and the tax revenues should fall proportionately.

Such a tax would compensate the Yukon, not only for the government costs that will be incurred during and after the period of construction, but it will also compensate the Government of Yukon for lost revenue yields from other projects that have been delayed.

One example of the impact of the proposed pipeline was given by Mr. Vic Jutronich, Vice-President and General Manager of Whitehorse Copper Mines Ltd., who gave evidence on behalf of the Yukon Mine Operators Association. He stated that engineers associated with five large mineral deposits have indicated that if they follow their present plans, there is a strong possibility that all five deposits could be brought into production in the early 1980s. However, if Foothills goes ahead with its project, he thought that the activities necessary to bring these mines into production should be delayed (48-6772).

This delay means that the Yukon will be without the jobs, taxes, and other benefits of these mines because of the pipeline project. And, of course, as Mr. Jutronich stated, the delay and the wage increases caused by the Foothills project raises the possibility that one or more of these deposits may never be developed (48-6764).

All of these factors support the proposition that a taxation scheme for the Foothills pipeline that approaches equivalence to the taxation scheme in Alaska of similar pipelines is necessary and equitable.

Earlier we referred to the concern of the Yukon government that, in practice, any net revenue gains resulting from taxation of the pipeline construction and operation would merely go toward reducing the Yukon's operating grant from the federal government. In addition, in various parts of the report, we have stressed the need to ensure that the Yukon and its people derive some long-term benefits from the pipeline project in return for the burden they are being asked to bear. Property tax revenues can and should be used to contribute to serving this need. Therefore both to meet the need and to ensure that the increased revenues accrue to Yukoners, it is recommended that one-half of the annual property tax revenue from the pipeline be paid directly to the Yukon Heritage Fund described in Chapter 11.

Because there will be a need for government revenue in the years of construction, and because most of the revenues from the property tax would begin to accrue to the government once the pipeline facilities are completed and the gas is flowing, this payment to the Heritage Fund should not commence until the first year

that gas starts to flow through the pipeline. Until that time, all revenue from the property tax should go to the Government of Yukon. Thereafter, such payments should be collected by the Yukon government and one-half held in trust for the Heritage Fund until the money is transferred to the Heritage Fund.

Recommendations

A detailed study, taking into account inflation, all possible social and economic impacts, in-migration, and the capacities of existing government departments should be undertaken once a route is selected. The underlying motive should be that these expenditures should not be underestimated and that a significant margin should be allowed for them. These expenditures should include the various programs that the government may be required to adopt because of the pipeline project.

Regardless of the financial relation between the Government of Yukon and the federal government, the Government of Yukon should tax the pipeline in a fair and equitable manner. The taxpayer in the Yukon or in Canada should not subsidize the Applicant or the American consumer. The closest jurisdiction to the Yukon, in terms of a similar pipeline that has a similar impact on the existing infrastructure, both short-term and long-term, is Alaska; the Government of Yukon should impose a property tax that approaches equivalence with the property tax in Alaska. To tax at any lower rate would be inequitable, as between the Yukon and Alaska, and inequitable as between Foothills and other Yukon taxpayers. The pipeline and related facilities should, therefore, be assessed at approximately 30 per cent of their actual construction cost in the Yukon. The same mill rate should be applied against the pipeline and its related facilities that is applied against other capital improvements in the Yukon. One of the few long-term benefits to the Yukon, other than the 200 jobs that will become available during the operations phase, will be the existence of valuable property in the Yukon that may provide a constant flow of tax revenues.

Commencing in the first year that gas flows through the pipeline, one-half of the property tax received from Foothills by the Government of Yukon should be paid to the Yukon Heritage Fund, described in Chapter 11. Before that time, all revenues should go to the Government of Yukon to defray project-induced expenditures.

Given these recommendations, the Government of Yukon should not find it necessary to adopt a sales tax

at this time. Such a tax, although it would collect revenue from the pipeline project, would impose an unfair burden on Yukoners living on low incomes, and, unless it is imposed well in advance of construction, it would add to the inflationary pressures that the construction of the pipeline will bring to the Yukon.

Gas Supply to Communities

Although the pipeline is designed to take American gas to American consumers, the Applicant has included in its proposal a plan to make natural gas available to communities along the pipeline route. Yukoners perceive this to be one of the major long-term benefits of the pipeline.

The Commissioner of the Yukon expressed the common feeling of Yukoners when he said that "we feel that one should not go thirsty when there is a river flowing past one's door" (43-5852). The importance of this proposal, in its relation to the rising cost of fuel, was expressed by Mrs. Ernie Watson of Haines Junction:

The applicant has stated that natural gas will be made available to all communities along the highway at the same price as that paid at the Alberta border, should the pipeline proposal be granted. To me, this is one of the most appealing features of the pipeline proposal. It would provide an assured supply of heating fuel at rates comparable to southern Canada. To my knowledge, this would be the first time that Yukoners had equal rates to southern Canadians (13-1985-86).

At present, Yukoners use three sources of energy: electricity, fuel oil, and wood. The Northern Canada Power Commission operates hydroelectric plants in Mayo and Dawson, and an interconnected system of hydroelectric and diesel plants in Whitehorse, a diesel plant in Faro, and a hydroelectric plant on the Aishihik River. The Yukon Electric Company operates a number of diesel plants in smaller communities throughout the Yukon. Cassiar Asbestos owns and operates a diesel plant at Clinton Creek, which supplies the asbestos mine and the nearby town.

About 60 per cent of the total sales of electricity are to the mining industry, and the Faro Cyprus Anvil mine alone accounts for 33 per cent of the total sales. However, sales of electricity for home heating have been increasing, particularly in Whitehorse. The geographical location of the Yukon is reflected in the fact that the per capita consumption of electricity is

much higher than the average Canadian consumption. The government subsidizes the price of the first 300 kilowatt hours per month to consumers in Whitehorse and the first 500 kilowatt hours per month to consumers in other Yukon communities.

Fuel oil is the staple source of heat for many homes in the Yukon, and it is also used to produce electricity in thermal power plants. The cost of fuel oil is the most important element in the cost of producing power by this means. Pressure by external factors on domestic fuel prices is intensified in the Yukon because of high distribution costs due to a small population and the great distances between communities.

Some Yukoners, especially Indians, continue to use wood as their primary heating fuel. Because it is free and readily accessible, Yukoners are increasingly using wood to supplement their regular fuel, but there are no figures for the number of Yukoners who rely on wood for fuel.

The Proposal

The Applicant plans to supply natural gas to Yukon communities from the main pipeline. The amount supplied to these communities will be replaced by gas obtained in Alberta, so that the amount of gas reaching the United States will be the same as that leaving Alaska. The Applicant has proposed to construct laterals from a mainline along the Alaska Highway to carry natural gas to eight Yukon communities: Beaver Creek, Burwash Landing, Destruction Bay, Haines Junction, Whitehorse, Teslin, Upper Liard, and Watson Lake (29-3350). The President of Foothills contemplated that these laterals would be put in "as an integral part of the construction program of the main line" (46-6467). The cost of these laterals will be added to the total cost of the main pipeline and shared among all consumers of natural gas. By absorbing the costs of the lateral pipelines in the cost of the main pipeline, the American consumers of natural gas would be effectively underwriting most of the cost of supplying gas to the Yukon communities. Approximately 35 miles of lateral pipelines would be constructed to these communities at an estimated cost of \$2.3 million, a cost that the Applicant calculated would increase the price paid by the American consumer by the amount of \$0.0005 per thousand cubic feet, an amount which the Applicant has referred to as being "so small that you wouldn't be able to find it" (31-3720).

Users in the communities will then pay a price equal to the Alberta Border Price, plus the cost of local distribution. The communities or the Government of Yukon will be responsible for constructing local distribution lines to deliver the gas to individual

consumers. Foothills' position on this service was stated by its President in this way.

Our position is that if enough residents or commercial operators or industrial operators within a community elect to take gas service and provide a minimum base load or nearly provide a feasible base load, then the service will be provided and [on] the terms which have been described at various times in previous portions of the Inquiry by either Mr. Burrell, who is the vice-president of Foothills, or by myself (45-6251).

The Applicant also proposes to contribute \$2,500 per potential residential user of gas by way of a subsidy for the construction of laterals to other Yukon communities. Capital costs over and above this amount would be the responsibility of the community, which would have two years from the date of the first delivery of gas to decide whether or not to take advantage of the offer (Exhibit 175, *Response to Request by Mr. Phelps*, vol. 31, p. 3796A).

Gas could be supplied to all residential, commercial, and small industrial users in communities along the route. The Applicant has also undertaken to supply thermal electric plants with natural gas, which could then be substituted for fuel oil (29-3457). Gas would also be supplied to existing industries on the pipeline route; in the words of the President of Foothills, "We – the arrangement all anticipates serving the kind of industry that is here now" (46-6409). The Applicant was, however, hesitant to make a blanket promise to supply all future industrial users; delivery to existing industries off the route and to all new industries would be negotiated on an individual basis.

As mentioned above, the Applicant proposes to exchange gas from Alaska for gas from Alberta, a scheme that would require the approval of a number of federal, provincial and American regulatory agencies. This exchange was included in Foothills' application to the National Energy Board and by Northwest Pipeline's application to the United States Federal Power Commission. It is thought that the necessary approval from Alberta can be obtained without difficulty.

Foothills presented evidence to the Inquiry that illustrated the potential savings of substituting natural gas for fuel oil and electricity in all of the communities surveyed, except in Whitehorse, where the difference in cost between electricity and gas was not significant. No comparisons of cost were available for Burwash Landing or Upper Liard, two Indian communities where wood is the primary fuel.

The Applicant presented details on the supply of natural gas only to communities along the Alaska Highway route. A spokesman for the Applicant said

that, if the Tintina Trench route were chosen, it would not be economical to build a lateral to supply gas to Whitehorse because of competition from electrical power (31-3725). The President of Foothills indicated that it might be possible to run a lateral the slightly shorter distance from a route along the Klondike Highway to Faro to serve that community and the industrial customers there (46-6441).

Electricity, Fuel Oil and Wood

The Applicant proposes to effect large savings in fuel costs for the users in four of the communities along the Alaska Highway: Beaver Creek, Watson Lake, Teslin, and Destruction Bay. Fuel oil prices are very high in these communities, and electricity in them is generated by fuel oil. The use of natural gas would reduce the cost of generating electricity. Smaller savings are predicted for fuel oil users in Whitehorse and Haines Junction. There is evidence that in at least two of these communities, Upper Liard and Burwash Landing, natural gas would not be competitive with wood, the existing fuel source.

However, Whitehorse residents who heat with electricity rather than fuel oil would not benefit from the same saving. If the annual cost of natural gas is compared to that of electricity in Whitehorse, and this cost is calculated on the basis that the same price will be charged for natural gas in every community across the Yukon, those Whitehorse residents would save less than \$130 in the fifth year of service and less than \$75 in the tenth. With a pricing scheme based on different community prices to reflect each community's cost of distribution, the Whitehorse consumer would pay almost the same amount for natural gas as for electricity in 1991, the tenth year of the natural gas service. The Applicant admitted that there would be no incentive for the Whitehorse consumer who now heats with electricity to convert to natural gas (31-3701).

Any benefits from conversion to natural gas would accrue to a relatively small proportion of the Yukon population, a proportion that is not a representative cross-section of the population. Indians would benefit only minimally, because a large proportion of Indians use wood for fuel, especially in the communities of Burwash Landing and Upper Liard. The lawyer for the Council for Yukon Indians, in his closing argument, summed up the Indian's position:

Yukon Indian people are unlikely to benefit from Foothills' proposal to provide natural gas to communities, since the majority of the native people along the Alaska Highway presently use wood as their main source of fuel. The cost of conversion, plus the cost of using natural gas, would discourage Indian people from opting for it (50-7191-92).

The benefits of conversion would accrue only to individuals living in communities along the pipeline route that is chosen. In those communities, only individuals who have the financial incentive and sufficient capital to convert to natural gas will benefit from the Applicant's plan. It is unlikely that Indians or the residents of Whitehorse will benefit to any significant degree.

The costs of converting appliances and heating systems would be a significant factor in a consumer's decision to substitute natural gas for electricity or fuel oil. The Applicant has promised to launch a campaign to tell consumers about the advantages and the costs of conversion, but, because conversion would require a significant capital outlay, it appears that, outside the four communities where large savings are projected, only new home owners would be likely to use natural gas, particularly if the costs of conversion rise at the projected rates. There was conflicting evidence on the costs of converting from fuel oil to gas. The Applicant relied on an estimated cost of about \$700 in 1980 dollars to convert, whereas other evidence indicated that the cost, in 1979 dollars, would range between \$800 and \$1,500. These costs, when projected into 1986 and 1991, the years when cost savings become available, offset much of the economic incentive for switching to natural gas, which has been projected in 1986 and 1991 dollars (31-3699-3701).

In any case, the savings calculated by the Applicant are questionable for a number of other reasons. The Applicant estimated the local cost of natural gas on the basis of a high percentage of potential customers in the various communities and of significant demands from industrial users. Distribution costs are a major component of the price of natural gas, and the major part of these costs does not vary with the number of customers. Fewer customers would result in relatively unchanged costs, which would, however, be shared among fewer customers, and the price per unit would increase significantly. The number of private consumers might easily fail to reach the Applicant's projections, particularly because of the cost of converting from fuel oil to natural gas. The fact that new industrial users will be negotiating their price on a case-by-case basis leads one to doubt that the demand from industrial users will meet the Applicant's projections.

The industrial development that some Yukon communities anticipate will be encouraged by the supply of natural gas is unlikely to materialize. The price of natural gas to industrial users, which at this time is uncertain, will not in any event be lower than the Alberta Border Price. New industries in the Yukon

would, therefore, not be competitive with industry in Alberta, which pays less than this price for natural gas.

The essence of the Applicant's proposal is to transmit American gas to American consumers. There is no economic incentive for the Applicant to encourage the consumption of natural gas in the Yukon. On the contrary, there are good reasons for the Applicant to discourage significant increases in local consumption, once the pipeline is constructed. The Applicant testified that there was a ceiling on the volume of gas that would be covered by agreements with the Alberta producers, and increases in the Yukon sales above that ceiling would require further arrangements (31-3713). Where the incentives are so weighted against good service by the supplier, the benefits to the consumer should be carefully calculated.

Proposals and Recommendations

The value of the supply of natural gas to the Yukon, although difficult to assess (given the limited nature of the evidence), is unlikely to be of material, long-term benefit to Yukoners, although some of the small communities along the proposed route might reap significant benefits from the proposal. However, these communities represent a relatively small number of people, and it is unlikely that the Yukon generally will benefit from any significant industrial development because of the availability of natural gas. The value to these communities is contingent on the choice of a route along the Alaska Highway.

Nevertheless, the Applicant's proposal to build laterals at the time of construction of the main pipeline should be accepted and made a condition of the lease. Actual connection for service can be contingent on the formation of a distribution system and on an indication from the community of sufficient demand to justify the distribution system. The Government of Yukon should decide the pricing system to be imposed.

The Applicant's undertaking to subsidize the cost of a lateral to any community by \$2,500 per potential user of gas should also be a condition of the grant of a right-of-way. The offer should be open for two years after the first flow of gas to give the communities an opportunity to assess the benefits of the proposal.

The Applicant's undertaking to supply gas to industrial users has not been consistently advanced throughout the hearings. It is impossible for rational planning to go forward when the price of fuel to potential industries cannot be determined. The Applicant should be required to supply natural gas at the Alberta Border Price, or less, plus distribution costs, to all existing industries in Yukon communities along the pipeline

route that wish to use it. The Applicant should be required to supply gas to any new industrial users on terms to be negotiated in each case, but these terms should be equivalent to the terms made between the suppliers of natural gas in Alberta and industrial users there with respect to the sharing of the costs of laterals and distribution. The base price to new industrial users should be the Alberta Border Price.

Many Yukoners consider the supply of relatively cheap natural gas to be one of the major long-term benefits of this project. Our preliminary examination questions the value of this supply to industrial consumers along the route and to Yukoners in general.

Electrification of the Pipeline

We have discussed earlier the negative impact of the pipeline project on the Yukon mining industry, but its short-term impact could be offset if the pipeline stimulated a hydroelectric development. Spokesmen for the mining industry presented evidence to the Inquiry that future mining developments would require more power per ton than is used in existing mines and that the availability of cheap power would be a determining factor in future mining development.

One of the potential stimulants for a hydroelectric development would be the guarantee of a base-load demand for power from the compressor stations along the pipeline route. If the hydroelectric development had excess capacity that could be diverted to the mining industry, then the opening of new mines would be encouraged.

The most important prospects for new mines lie northeast of the Tintina Trench, and the mining spokesmen pointed out that the pipeline and any associated hydroelectric development should be planned to complement the anticipated expansion of mining activity in that area.

The President of Foothills testified that representatives of his company had discussed the possibility of a hydroelectric development with the Chairman of the Northern Canada Power Commission. The current plans of the Applicant are to install gas turbine motors and to power the compressor stations along the pipeline with natural gas from the pipeline. However, the compressor stations could be built at an additional cost of \$300,000 per station so that an electric motor could, at some time in the future, be substituted for the gas turbine motor; there would also be extra costs for

labour and the electric motor at the time of any substitution. The Applicant will build the design into each compressor station if, when the design of the compressor stations is finalized, the Northern Canada Power Commission or the Yukon government is still actively interested in the possibility of a hydroelectric development to service the line (46-6388-91).

The Applicant would not estimate what the price of electricity would have to be to encourage it to substitute electricity for gas in the compressor stations, because the future price of natural gas, a crucial factor in determining the economic viability of the substitution, could not be predicted with any confidence (46-6392). Mr. Blair, however, did indicate that Foothills might effect the substitution even if it were uneconomic to the company, in which case the considerations would be,

Largely economics but also I conceive that relations with the Government of the Yukon could be a factor also. It's not beyond the possibility at all, that action might be taken with the agreement of the other parties in order to fit in with an electrical development which was considered in the public interest here as a matter of accommodating the purposes of the Governments of Yukon and of Canada (46-6464).

A pipeline along the Alaska Highway would create a base-load demand for approximately 160 megawatts of electricity, an amount double the current capacity of the Yukon system. The construction of the Dempster lateral and the routing of the pipeline through Dawson would raise this demand to over 700 megawatts.

It is impossible for this Inquiry to assess conclusively the economic viability of a potential hydroelectric development associated with the compressor stations. However, evidence presented to the Inquiry on future hydroelectric developments in the Yukon indicated that a major hydroelectric plant could not produce electricity for less than two cents per kilowatt hour, and that electricity would have to be supplied at much less than two cents per kilowatt hour before it would be competitive with natural gas and before the substitution would be economical (Exhibit 77, *Evidence of Robert McCandless*, p. 3). If this is so, it appears that electricity cannot be supplied to the pipeline at an economic rate. Consumers and industrial users in the

Yukon should not be called upon to subsidize the supply of electrical power to the Applicant.

Recent hydroelectric developments have revealed that economies of scale may be illusory and that the cost of electricity depends on the characteristics of the particular site; in some instances small developments are more economical than large ones. We recommend that discussions between the Applicant and the Northern Canada Power Commission be pursued to determine if the compressor stations could be designed to permit electrification of individual stations without necessarily electrifying the complete system. Evidence from the Applicant suggested that this changeover from gas to electricity could occur one station at a time, which suggests that it would be possible to power only a portion of the system electrically (46-6390).

A guarantee that the Applicant would convert those compressor stations close to a potential hydroelectric project might encourage the development of some small hydroelectric projects that would benefit local communities now dependent on thermal electricity and that might also benefit mines nearby. Local hydroelectric developments would also minimize the importance of a back-up system for an electrical facility that powered the whole pipeline. One of the practical problems with the electrification of the pipeline was the need to hook up with the power grid in British Columbia to provide such a back-up system in the event of a power failure in the Yukon.

Although preliminary indications are that electricity could not be supplied to the pipeline at a rate that would make it competitive with natural gas, this matter is of sufficient importance to be examined in more depth. The Northern Canada Power Commission should undertake further study to determine whether or not electricity could be supplied to the pipeline at a rate competitive with the cost of the gas that would be saved. This study should assume that the Applicant could convert either all of its compressor stations to electricity or only some of them. The Applicant should be required to convert to electricity, if the Northern Canada Power Commission can supply it with electricity at any given station at a stipulated price. The price should not be less than the market value of the natural gas that is consumed in powering the pipeline.

7 Social Impact



Whitehorse day care centre (Whitehorse Star)

(Yukon Indian News)

Games played during summer celebration in Whitehorse

(Yukon Indian News)

The former Anglican mission school at Carcross

(Public Archives of Canada)



Yukon Communities

About 75 per cent of the total estimated Yukon population of 21,800 lives along the Alaska Highway, that is to say, along the corridor of the proposed pipeline. The concentration of population along this route has tempted some witnesses before the Inquiry to examine the implications of its social impact solely in terms of scale. A submission at the Faro community hearings, for example, pointed out that construction along the proposed corridor would adversely affect the greatest possible number of Yukoners.

In our view, such an emphasis on numbers is misleading. It conceals the fact that the population along this corridor is unevenly distributed in eight distinct communities. The differences between and within these communities cannot be grasped merely by counting heads. Throughout the hearings, we were impressed by the diversity of Yukon society, and the need to understand that diversity in assessing the impact of the pipeline. Detailed profiles of the Yukon communities visited by the Board may be found in Appendix B of this report. Here we shall simply sketch some of the contrasts among them in size, age, and composition.

Whitehorse, the administrative and commercial centre of the Yukon, became its capital only in 1953. Since then, it has more than quadrupled its population. The 13,000 residents of Whitehorse account for approximately 80 per cent of the population of the Alaska Highway corridor. The largest of the other seven communities along the proposed corridor is Watson Lake (population 1,100). The Applicant intends to build permanent operation and maintenance installations for the pipeline at Whitehorse, Watson Lake, Beaver Creek (100), Haines Junction (500) and Teslin (350). The other communities along the proposed route are Upper Liard (250), Destruction Bay (80), and Burwash Landing (65).

Difference in size is not the only variation exhibited by the corridor communities – or, for that matter, by other communities in the Yukon. Some, such as Burwash Landing and Upper Liard, and some settlements away from the corridor, such as Carmacks, Old Crow, and Pelly Crossing, are predominantly Indian communities. Other corridor communities, such as Destruction Bay and Watson Lake – and Faro, which is off the corridor – are predominantly White. Still others, such as Ross River, Teslin, and Carcross, are fairly evenly balanced in their Indian and White populations. In Whitehorse, Beaver Creek, Haines Junction, and Dawson, Whites are in the majority. Nonetheless, by far the largest

concentration of Indian people along the corridor is in Whitehorse.

Age, too, accounts for striking contrasts among the Yukon communities. The town of Faro is only eight years old; it is a company town, built to accommodate workers at the recently opened Cyprus Anvil mine. Among the corridor settlements, Destruction Bay, Watson Lake, and Haines Junction are also relatively young, the results of war-time and early post-war development. Haines Junction, however, is located in an area long used by traders and for temporary habitation by Indians. At the opposite end of the spectrum are places like Burwash Landing and Old Crow. Archaeologists believe that the Kluane Lake area, in which Burwash Landing is located, has been occupied intermittently for as long as 8,500 years, and the Old Crow area is believed to be the location of one of North America's oldest human habitations, dating back more than 30,000 years.

In assessing the social impact of the proposed pipeline, it is impossible to ignore the varied origins and characteristics of these settlements. Similarly, to understand the communities themselves, it is necessary to take into account the perspectives of their residents, and to understand the complexity of the attitudes and activities that shape their lives. For instance, an outsider might view trapping, in which many Yukoners engage, as equivalent to wage employment or, on the other hand, as merely a leisure pastime. Either view may be true of Yukoners. As far as other Yukoners are concerned, however, to isolate trapping from the other aspects of life to which it is connected, without knowing all the activities involved – the preparations, the maintenance of equipment, or of the spin-off benefits, such as the acquisition of country food – is to misunderstand entirely the pattern of life of which trapping is a part. This misunderstanding, in turn, may distort decisions about the effects of the proposed pipeline, about planning for it, and about compensation for damages caused by it.

Trapping, however, is only one example of the sort of thing we are trying to emphasize here. For some communities or segments of communities, there may be many other activities and concerns that, unless they are closely examined, are susceptible to similar misunderstanding or misinterpretation. Certainly the communities of the Yukon are sufficiently diverse to make us suspect that this is so. Some are composed almost entirely of persons who have come to the Yukon since the Alaska Highway was built, and who are engaged in full-time wage employment. Such persons, if they are typical of the people who come from the south, will probably identify themselves and relate to other persons according to their employment, and they

are likely to regard anyone who does not participate in the wage economy as being unemployed. On the other hand, there are people in the Yukon who have come from the south specifically to escape full-time involvement in the wage economy in favour of a more varied way of life.

Other communities in the Yukon are composed almost entirely of Indians, who may be engaged in wage employment in varying degrees, but who do not necessarily relate to each other solely in terms of occupation. Still other communities may represent mixtures of the two kinds of employment.

Moreover, there are communities of Indians who, by tradition and lifestyle, are themselves quite different from each other. In brief, there are differences among all the communities, according to the activities of their residents and their familiarity with non-local issues.

We do not think that it will be easy to work out a perspective that will accommodate the differences of all the communities in the Yukon. Ideally, to assess the impact of the proposed pipeline, it would be desirable to have a clear and comprehensive idea of the composition, concerns, and internal organization (or lack of organization) of the communities that may be affected. Unfortunately, such information is almost totally non-existent. Our knowledge of the Yukon at this time is not nearly complete enough to provide the basis for a detailed, comprehensive, or sensitive evaluation of the pipeline's potential impact.

Nonetheless, this Inquiry has made a preliminary effort to establish a foundation on which future research might be built. Our suggestions for the directions of future research appear at the end of this chapter. They are derived from the submissions of witnesses who appeared at the formal hearings, and from the expressions of hope and fear about development that we heard at the community hearings.

The Changing Population

One of the subjects most commonly addressed at the community hearings was that of previous experience of developments in the Yukon, and the changes or disruptions they had caused to people's lives. The Yukon is no stranger to development; the region has experienced cycles of boom and bust, with great fluctuations in population, since the days of the gold rush. We suggest that social impact of the proposed pipeline should not be considered only in terms of numbers of people affected; however, it may be useful to examine briefly the relation between past developments and past population increases and

declines in the Yukon. This provides a context in which to place predictions concerning the possible effects of construction-related in-migration as well as some background to the attitudes the Yukoners hold today toward these developments.

For the past 80 years, the population of the Yukon has experienced some dramatic fluctuations. During the gold rush, the population increased from 5,000 to 40,000 almost over night; it then declined to 8,500 by 1911 and remained relatively stable at 4,000 to 5,000 through the next three decades, until 1941 when construction of the Alaska Highway began. Between 1941 and 1951, the population doubled. Mineral exploration and government-assisted construction activities caused another increase, raising the population to about 14,500 by 1961. For the next five years, owing largely to military personnel and many federal employees returning south, there was little or no growth.

The latter part of the 1960s and the early 1970s witnessed another surge in population growth brought about by an increase in the number of federal and territorial government employees, which now form about one-third of the Yukon work force, and the rapid expansion of the mining industry. These fluctuations are almost entirely the result of changes in the size of the White population. The Yukon Indian population has remained relatively stable, with a recent natural increase to an estimated 6,000.

The difference in demographic behaviour between Indians and Whites means that, given both the natural increase and net in-migration of Whites, the Indians have become a much smaller part of the total population than they once were. Moreover, in times of economic boom and with associated in-migration, they account for a smaller proportion of the total population. These are the facts behind the fear expressed by some Indian people at the community hearings of losing influence in a society that is undergoing heavy in-migration.

Attitudes Towards Development

Given the variations in size, age, and composition of the communities, and the history of the fluctuations in the population of the Yukon, it is not surprising to find a wide range of opinions among Yukoners concerning the effects of developments, such as the building of the Alaska Highway and other highways, and of pipelines, mines, and hydroelectric projects. The different impacts of these many projects have left people with differing views about future development. However,

one must also acknowledge that it is difficult to isolate completely the cause-and-effect relationship between these views. The almost total lack of research on the effects of past developments makes retrospective analysis of impact a risky basis for assessing impacts in the future. On the other hand, we must take some notice of the fact that individuals who are faced with a prospective development will consider it in the light of their own and their community's experience with similar projects in the past.

Many persons at the community hearings told us how they regarded past developments in the Yukon. The account of Father Henk Huijbers at Burwash Landing puts past events in the context, not only of development in the Yukon, but also of events beyond its borders:

The man was the provider. He would go out catching fur in the winter, hunting food for his wife and children. The women were seamstress, making the clothes and footwear from the skin their husband brought in . . . Then suddenly, due to circumstances of war, a highway was built. Men were requested to work as guides for the Army caterpillars from settlement to settlement. Later, they worked for the civilians that were finishing the highway and followed up the Army. You can imagine, after all these years, what a change that brought in the way of these people. A change of living, a change in the language, a change in culture, even a change in food and clothes . . . the men were working from time to time, and not in one place, Burwash, but also in the other settlements along the highway, and due to the fact that there was need for the wood to be cut for the camps that were there partially or temporarily or even for five, six months, the man went out and did the woodcutting. The families came closer to the highway, left the bush, left the trap lines.

They were very happy people in the bush, but soon there was no more work available. They always had to return . . . because the trap line, and the hunting rights, and the fishing rights gave them the facility to live their own life. But suddenly, the year [1948] I came in, due to several reasons, synthetic fur and others, the fur market prices dropped out of sight. Even if the man went trapping at a loss, at 25 or 30 cents, when you start counting the time he goes, sets his traps, cleans his fur, brings his fur back, and prepares it for the market, there was not 25 cents an hour.

There was no subsidy available for traps . . . There was subsidy available for fisheries. There was subsidy for mining, there was subsidy for tote roads, there was subsidy for transportation, but there was no subsidy available for trappers. And that would have been the time that the man, who knew what trapping was and who knew it inside out, would have been able still – in that time – to be the provider for his family.

What happened then? White men came out with a Family Allowance. That was introduced . . . I believe in '48. The

man lost his role as provider, because the Family Allowance automatically went to the mother.

Then the Old Age Pensions were paid, I believe '51 or '52, I don't recall anymore, I have signed many forms, but it was around that time. Again, it took some activity away from the man to provide for his families. So they hung around the settlements and the highway. Quite often they had nothing to do, because it was not worth while to go trapping. Fur had no value. They started drinking.

The effect was obvious. Family break-ups, deterioration of whole settlements, soul and moral downfalls. All there was to do was to wait for the next cheque. Most of our Indian people could not adapt themselves to a rapid change in their way of living (12-1912-14).

Don Taylor, elected member for Watson Lake, spoke from the slightly different perspective of someone living in a town that exists because of the Alaska Highway's construction:

... Watson Lake has experienced and survived a great many major developments and, in fact, it was the construction of the Watson Lake airport and the Alaska Highway that gave birth to the expanding community you find here today.

Indeed, we once experienced a pipeline and a bulk-storage facility here in Watson Lake, in connection with the Canol and Skagway systems. Amongst the many great developments of the North, we engaged in the growth and construction of such complexes as Cassiar Asbestos and Canada Tungsten. We have been directly involved in the construction of all our trunk road systems and have by experience, Mr. Chairman, shown our ability and willingness to cope with such undertakings.

And I must add that, as a direct result of this experience, our local economy has reasonably prospered and our community has been substantially enriched by the many people who came here to work and decided to stay on a permanent basis. It was the very existence of these and many more projects that made it possible for the introduction of many new businesses and light industries. With these developments came the tradesmen, their skills, all of which was essential to local and territorial growth and stability and has beneficially contributed to our collective well being in this community (16-2185-86).

Others spoke of their memories of the past as the reason for their fears of the future. Mrs. Mary Charlie of Ross River, speaking through an interpreter said this:

She says from past experience, when the pipeline was going through here, when the North Canol was being put through here, there was a lot of social problems happened in Ross River. She says there was a lot of people that still remember these happenings – what the people did when they were coming through. She says there was a lot of problems in the village. The people were scared. The people had to move out and that she's afraid this might happen.

She says that, a long time ago, when these people that were building that line [they] were also chasing a lot of women, and they were also chasing around kids, you know, just young kids, and she says that there's a picture she has here of an old man – and I think he died – and he, I guess he witnessed that, whatever was happening here, and his wife is still living today yet.

So that's why we don't want to see this type of thing or this pipeline and they're afraid that this might happen again. From past experience, these people [are] causing a lot of problems, causing a lot of family problems in the village, and they're all so scared that this might happen again. That's all she has to say (21-2671).

At the Teslin community hearing, Ms. Georgina Sidney read from a brief in which her aunt, Ms. Madeleine Jackson expressed this view:

Before the highway went up there – up here in 1941 – everything and everybody had a good life. Nobody got sick or drink everyday like today. Maybe they would have a drink now and then, but now as the bars and whiskey is open to us, people drink every day. I sure wish it was like the olden days. It sure was nice here in Teslin. Now they want to build a pipeline through here and it will be – it will get worse and worse (19-2424).

Others felt more confident that there would be benefits from the proposed pipeline, but they, too, were aware of the possible dangers, and were concerned that the pipeline should be considered in a balanced perspective. Mr. Ron Watson's brief, read by his daughter-in-law, Mrs. Ernie Watson, described some of the projects that had taken place in Haines Junction:

Most of these projects had some effect on Haines Junction as a community. They gave our small community a taste of the boom-and-bust or ups and downs that result from these developments. The refinery shut down, the experimental farm was closed, and the pipeline was shut down. All of these had a marked effect on the social and economic life of Haines Junction. I cite these instances to assure members of the Inquiry that we have the necessary background to be able to assess the Applicant's proposal on its merits, at least as far as it applies to our community.

On the positive side, each one of these activities assisted the community to develop. They brought additional permanent residents who required housing and other services. They enabled the residents to build their own community club and to provide recreational and social activities for all residents of the area.

Additional people enabled us to establish our own local improvement district and to provide water and sewer services to our town. Business was able to expand as a result of permanent residents, and our community became less dependent on Whitehorse for supplies and materials, and government provided additional services to meet the needs of our residents. While we still lack many of the services, we now at least have a good solid

base to develop from. With reasonable lead time, I feel that our community could respond to the needs that such a proposal as the pipeline would require (13-1981-82).

At the same hearing, Mrs. Hilda Watson, member of the legislative assembly for Kluane, commented on the social benefits of past developments to the community:

Kluane National Park has located 26 families in Haines Junction over the past four years. As a result, Haines Junction has grown in size and social scope. There's more involvement in common ordinary things, such as Brownies, Guides, minor hockey, wilderness hiking, the crafts, the library, music, the churches and so on. The new families have had a positive social impact on Haines Junction, and the maintenance personnel of the proposed pipeline would also enhance the social structure and social services of the communities where they are to be located (14-2016).

One of the themes that ran steadily through the testimony at the community hearings was that no previous development had been regarded as an unmixed blessing. Even those who felt that the overall result of boom-and-bust developments had been positive, took into account some of the negative effects. Mr. Taylor of Watson Lake spoke of having "survived," and the Watsons from Haines Junction carefully pointed out that they realized the need to assess both negative and positive impacts of the proposed pipeline. There emerged a feeling that the net gains of the past may have had a random quality about them. Mr. Jim Ryan of the Whitehorse Chamber of Commerce told the Inquiry:

Yukoners have historically used crises to develop – pipelines, railroads, telephone lines, electric transmission lines – all of these have been on the Yukon scene for years, and most of these past developments have been put in place as a reaction to an urgency. The gold rush, World War II – it is obvious what they gave

In fact, about the only systematic approach to development was the Roads to Resources Program put in place to encourage mineral exploration and development – and it did.

Surely, it is time to encourage a systematic approach to development that will give the Yukon use of its resources, yet minimize future environmental disruption (9-1477).

Along the same lines are the remarks of Mr. George Shaw, who spoke at the Dawson community hearings. He thought that controls would play an important role in permitting the Yukon to derive lasting benefits from the pipeline.

. . . so that I feel personally, and this is the way I'm speaking, Mr. Chairman, that a pipeline can give a lot

more than it takes, if proper controls are placed right from the start. It's no use after it gets going – once something gets going – but before anything is undertaken, these rules are applied or the laws are created and applied strenuously.

If we go back in history, like I've mentioned, it's very short history, 40 years ago. You see, had that road not come through, that Alaska Highway, I don't think we'd be sitting, all sitting in this room as we are now, because the country would be – there would be no industry.

... without roads – the only industry could have been the Mayo silver mines and the Dawson gold area, and that would have been it.

Your population in Whitehorse would have been just about the same as what it was then, maybe two or three or four hundred people, except to serve the tourists that come up. So that the same, in my estimation, would apply to a pipeline (24-2949).

The association between past developments and the proposed pipeline is apparent in almost all of the foregoing remarks. For some communities and some observers, the overall effect of past developments has been good, and they are confident that they can use their experience of the past to help them profit more fully from any future development. Others expressed their feelings that past developments had, on balance, had a negative effect on them and their communities. Yet they, too, stressed the need to learn from past experience and to carefully plan for the future.

At Teslin, Ms. Georgina Sidney eloquently voiced her concern on this subject:

We're uniting – like we were before, before the highway came through. People worked together here, they hunted together, they took care of each other. Now, no one is taking care of it, and the next door neighbour – they don't care. We've got to have our pride back and we've got to stick together. If the pipeline goes through, it is going to rip everything up. Like we're not stable right now. We're just getting stable, and if that pipeline goes through, it's just going to rip everything up (19-2428).

Mrs. Mary Hager, testifying through an interpreter at the community hearing in Mayo, declared:

... since the last few years, people used to drink lots, but now a lot of them quit drinking. And if the pipeline come through again, there will be many people that are going to go back drinking and things like that . . . She hear about all kinds of things going on like pipeline, and she said she's just got fear in her heart all the time. She's not like she used to be, long time ago (23-2824).

Mr. George Smith of Ross River put the matter this way:

From past experience, like Anvil Mines and large developments, which we were not prepared for, have caused us a lot of problems. Very few of us know how to work on any type of skilled jobs that are offered in large

developments. This is why we ask for a lot of time for us to prepare for a large development here in the North. We'd like to be taking part in all these things. We don't like to be shut apart – away from it – but we'd like to take part in development. This is why we ask for time. We're also asking for a land settlement before any major development here (21-2680).

In Dawson, Mr. Robert Fish expressed concern, in a brief read by Ms. Julie Kehoe, that the pipeline might destroy the character of his city:

... The links that tie this city to the past go deep and are, in many ways, delicate – a matter of just those intangibles. They will be destroyed or, at best, undermined and overlain by modern development of the crassest kind.

What is less known than its historic past is the fact that, over the last decade in particular, Dawson has been naturally growing into a community in many ways as vital and distinctive as the gold rush community at the turn of the century, and I, for one, would say that the present community may well prove more fruitful and significant, for it embodies many of the cultural characteristics and modes of life society at large seems to be increasingly seeking and dimly groping for (24-3013).

One of the conclusions that may be drawn from the accumulated evidence of the hearings is that, although Yukoners may differ with one another about the effects of the proposed pipeline, they differ in degree rather than in substance. They differ on the degree of harmful or positive net impact from past developments, the present population's readiness to deal with its lingering impact, and on the degree of advance planning and preparation necessary to ensure protection from the pipeline's possible disadvantages and to seize the benefits it may offer for the future. These differences are emphasized in yet another aspect of the reaction of Yukoners to the pipeline proposal. They do not regard the pipeline in isolation.

Many witnesses at both the formal and the community hearings spoke about the relation of the construction of the pipeline to other projects. Some of these other projects, such as paving the Alaska Highway, which may occur during the period the Applicant has proposed for pipeline construction, were thought to be part of a development package. Other projects expected to follow the pipeline's construction are viewed – realistically or not – as being consequences of the pipeline. Prominent in this latter group are the possibilities that natural gas will be provided to communities and that hydroelectric development will follow directly from pipeline construction. Some predicted that economic stabilization and industrial diversification would flow from these projects. Others regard the pipeline as the progenitor of large-scale

Neil Olsen presents evidence to the Alaska Highway Pipeline Inquiry at Haines Junction (Whitehorse Star)

Lena Johnson and Chief Joe Johnson, Burwash Landing (Whitehorse Star)

Women of Haines Junction listen to testimony (Yukon Indian News)

A resident of Mayo testifying at pipeline hearings (Yukon Indian News)



projects, such as aluminum smelters. These projects are discussed in detail in Chapter 6.

The fact that the pipeline is seen as an impetus to future development has an effect on predictions of its probable impact. Those who feel that the Yukon is unprepared for a pipeline will feel even more strongly that the Yukon is unprepared for the development that is likely to follow. Those prepared to view a pipeline as an acceptable, if not wholly positive development, may find its anticipated consequences unacceptable.

We have outlined in Chapter 3 some of the other developments that are most commonly associated in people's minds with the proposed pipeline. There we make the observation that the proper approach to these projects, many of which will be local and regional, rather than national or international in scope, is to consider each one as it arises. Consultation in the Yukon, on a project-by-project basis, will help everyone to put new proposals in their own context. The timely assembly of more detailed information about the social and economic life of the Yukon, and about the means required to monitor the impact of the construction and operation of the proposed pipeline, would also assist Yukoners to understand the implications of the project.

accurate indication of past trends, analyzing current trends becomes difficult, if not impossible. All that can be gained is a snapshot of contemporary Yukon society – but even such snapshot would represent more information than is now available.

In the next part of this section, we examine some of the omissions in Foothills' application and supporting material that have made our attempt at a preliminary assessment of their proposal more speculative than it might otherwise have been. Farther on, we point out the areas of research necessary for an informed assessment of social impacts. Immediately below, we explore what seems to us one of the most critical deficiencies in the information available to us.

Information About Subsistence

To date, information-gathering programs have not examined the extent to which Yukoners participate in some combination of resource harvesting and the wage economy. The subject appears to have been either overlooked or ignored, and the lack of reliable information hits at the core of a number of important decisions about the Yukon's future, especially such problems as the land claim, the advisability and timing of the pipeline project, and compensation for its impact.

It seems probable that, to provide for themselves and their families, some – perhaps many – Yukoners engage in various resource harvesting activities in the course of the year. Some of these activities are not recorded in administrative files. Others may be recorded, but the method of recording used for one activity may be different from that used for another. As a result, an administrator or investigator relying on these sources of information will gather only fragmentary or indirect evidence, and will be incapable of forming a picture of the whole range of harvesting activities that are part of a patterned and regular way of life for many Yukoners. For many Yukon communities, demonstrating and describing this pattern of land use will have a direct bearing on assessing the pipeline's social and economic impacts. Unconventional methods of research may be necessary to accumulate this information. The material that follows shows the fragmentary nature of information about resource harvesting now available from conventional sources.

The Yukon government's recent estimates of employment in the territory are significantly entitled *Employment and Unemployment – Best Guess* (June

Assessing the Pipeline's Impact

The Importance of Information

We were told frequently during the hearings that the all-pervasive problem in attempting to assess the social impact of the proposed pipeline is the almost total lack of base-line information. Obviously, decisions made without necessary and sufficient information may not be the best decisions. Lacking necessary information at the outset of a venture leaves one with no basis for monitoring the effects of the original decision. Without the ability to monitor on a long-term basis, it may be impossible to know which changes were caused by increased numbers of people, which should have been attributed to a pipeline, and which might have occurred anyway. The effect of information deficiencies are cumulative. Taking corrective action to remedy perceived impact, without data, simply means making another uninformed decision. And all of these decisions can take us, we suspect, farther away from an appreciation of the nature of society being changed. The failure to accumulate and use basic data, therefore, has long-range implications. Without an

16, 1977). Of an estimated Yukon labour force of 10,831, this report provides the following breakdown:

Government employment	3,429
Firms employing more than 20 individuals	3,900
Firms employing less than 20 individuals	1,500
Unemployment insurance claimants	2,002

These figures are revealing, primarily for what is left out. They do not tell us, for instance, how many individuals regularly engage in more than one occupation in the course of the year and thereby regularly fill and vacate the ranks of both the employed and the unemployed. Limitations on the perception of this problem could well produce limited solutions to it. For example, if it should be concluded from the information given above that the nature and scope of employment opportunities in the Yukon is inadequate for the existing labour force, then one obvious step is to try to broaden opportunities for employment. Any development that looked as though it might create more opportunities for employment would, therefore, be viewed positively. There is little doubt that some persons receiving unemployment insurance compensation would welcome the opportunities for employment thus created. But we also have reason to believe that some might not.

A 1977 survey conducted by the Department of Indian Affairs and Northern Development to collect base-line information on a number of Yukon communities produced evidence that suggests that there are a number of possible ways in which the Yukon government's employment figures might be regarded. Although the survey was hurried, and should be regarded as another "best guess" on current employment, it shows that, in the communities examined, approximately the same number of people are engaged in full-time wage employment as in part-time or seasonal wage employment. The survey also indicates that in many communities the number of Indians and Whites engaged in wage employment of various kinds is roughly equal. However, the number of Indians engaged in part-time or seasonal employment is disproportionately high. Presumably, some persons engaged in part-time or seasonal wage employment are included in the current unemployment insurance figures, and these figures may, therefore, give an unrealistically high indication of the number unemployed in any given year. This distortion might be partially corrected by the fact that some persons who do not or are not engaging in wage employment never claim unemployment insurance. Employment covered by unemployment insurance is limited strictly to wage

employment, and we have evidence both from the community hearings and from the Yukon government's records that many persons engage in other kinds of productive activity. Two such activities are the gathering of food and the harvesting of fur. During the hearings, many Indian people and some Whites voiced their apprehension over possible adverse effects of the pipeline on fish, fur, and game resources. They feared that in either the construction phase or subsequently, owing to an accidental break in the pipeline, these resources might be driven away or destroyed. Whether or not these fears are justified, their importance here lies in the fact that they clearly indicate that there is real concern with game, fish, and fur harvesting as a source of food and income.

The harvest of country food in the Yukon is poorly documented, although the Council for Yukon Indians has begun research on the subject. All we have, apart from a study of Old Crow, are the assertions made in the community hearings. At Dawson, Mrs. Angela Lypychuk told us:

... this is our country. The Yukon is our country. We are born here and the Natives born here. They make their living on the wild animals, like fishes, like ptarmigan, and rabbits and moose and caribous and so they make their living on those foods.

If a pipeline goes through here, they will destroy this – the animals which we live on. Like me, I'm pure genuine Indian. I love my Indian food. I cannot do without it. I don't like canned meat. I rather have genuine Indian food (26-3133).

In Carcross, Mr. Joe Jack described the importance of trapping in the Indian way of life:

Some people argue that today's Indian people do not live off the land any more. The land is our right and, because of it, it is a part of us, socially, economically, and culturally. Today, approximately 75 per cent of the present registered trappers in the Yukon are of Indian ancestry. But the sad part of it is that the majority of the smaller fur bearers are harvested by Indian trappers, while the majority of the more valuable long-haired furs like lynx are harvested by White trappers. This is not due to a lack of experience. I feel that it is just a lack of larger trapping equipment moneywise (44-5061).

In Burwash Landing, Mrs. Sandra Johnson spoke not only about trapping but also about the important contribution it makes to people's diet.

I have heard many White people say that . . . the people here no longer live off the land. That may be true – that they do not use the land as much as they used to but, speaking for my own family, I know that we get at least 80 per cent of our protein food from the land. Many older people here in the village eat almost all country food. If

we have to buy this food, our grocery bill would be very high indeed, and I doubt that we could provide our children with a healthy and well-balanced diet (22-2774).

To assess these claims about the value placed on resource harvesting, the research associated with the James Bay hydroelectric project is instructive. There, as here in the Yukon, the government's means of collecting information about hunting, fishing, and trapping made no provision for collecting information on the harvesting of country food. The Quebec government assumed that the lifestyle and activities of the Cree Indians near James Bay were already so modified and so directed towards wage employment that the proposed hydroelectric project would not significantly affect them. However, research on fur trapping and country-food harvesting carried out by anthropologists from McGill University demonstrated that the Crees still depend heavily on these resources, and further study has shown that the government's original assumptions were misleading. Investigation of this subject in the Yukon may well support the Indians' assertions about the extent to which they rely on country food.

Without further study, it is impossible to gauge precisely the extent to which these assertions are true. However, because a heavy reliance on country food would imply extensive use of land, we find significant the existing evidence that there is extensive use of land. The Yukon government's records list 387 individually registered trap lines, and a number of group trapping areas that are used by various Indian communities. The total number of trappers is estimated at between 500 and 600 individuals, of whom more than 75 per cent are of Indian ancestry. There is no reliable record of those who trap steadily or only intermittently each year, but we do know that, in 1975-76, Yukon trappers produced 28,897 pelts for a total market value of \$367,677 (Statistics Canada).

Our intention in presenting this evidence is not to suggest that conclusions may be drawn from it, but rather that there may be more than one interpretation of the fact that a relatively large number of Indian people are recorded as being engaged in part-time and seasonal employment. We have already mentioned one interpretation – that more employment opportunities are needed. Anyone holding this view would assume that people now engaged in part-time wage employment would, if they had the opportunity, work full-time. But to view the Indian people in this way is to place them at one end of a continuum, at the other end of which is a future that promises full assimilation into the wage economy. It is not necessary to turn to the substantial body of literature on this subject to find cause to hesitate before accepting this interpretation –

reflection on the recent history of the Yukon is sufficient.

In 1941, the population of the Yukon was approximately 5,000 of whom at least half were of Indian ancestry. Throughout the decade 1941-51, many of these Indian people were engaged in seasonal wage employment and, indeed, many moved to live near the new highway to get such employment. Today, although the Yukon population is more than four times the 1941 total, the Indian people are still not fully committed to wage employment. The question, of course, is why?

A complete answer to this question is not simple, and we certainly do not profess to have it. However, perhaps the seed of an answer may be found in the remarks made by Mr. Clyde Blackjack at the community hearings in Carmacks:

We have a little bit of money, but we are getting by pretty good right now. We don't need any more money. We got enough right now. If I need some more money, maybe I'll set a snare for squirrels or rabbits or something. That's good enough. I don't want to be rich and get carried away. I'm not going to live forever for that money (28-3305).

If we understand Mr. Blackjack's remarks correctly, he is expressing an idea that must seem incomprehensible to many entrepreneurs and businessmen. Through a judicious mix of wage employment, the trapping of fur, and the acquisition of country food, Mr. Blackjack appears to be able to produce what he needs. He is not interested in accumulation for its own sake, of being "carried away" with production solely for material gain. He has, as he cogently put it, not the least intention of living "forever for that money."

If many people are in Mr. Blackjack's position and concerned primarily with producing what they need, rather than producing solely for gain, then clearly they cannot realistically be viewed as moving toward full assimilation into an economy based on wage employment. The fact remains, however, that we do not really understand the true nature of this economic mode, so different is it from our own. Little evidence on the subject is available, and the few analyses that have been made of situations in the Yukon are rather dated. It is recommended that, as a necessary part of any full assessment of the social impact of a pipeline, the nature, scope, and implications of this mode of production be studied thoroughly in every Yukon community. Because the Council for Yukon Indians has already initiated research in this area, it would seem reasonable for the Yukon government to seek their advice on how it may participate, financially and otherwise, in the collection of this important information.

This brief has been heavily weighted toward the Indian people, largely because of the nature of what little evidence we have. However, the implications of our discussion should not be restricted to the Indian people. As is evident in the following comment from one of the community hearings, some Whites are also involved in this mixed economy of trapping for both cash and for food: "My name is Jack Richmond, and I'm a trapper most of the year. And the rest of the year I work in places like Faro" (20-2620).

Because statistics on this subject do not exist, it is impossible at this time to know how many people like Mr. Richmond there are in the Yukon. Nor should it be thought that a mixed economy of this kind involves all of the Indian people. The Indian organizations appear to be especially sensitive to the marked economic, educational, and organizational differences that exist within the Yukon Indian population. Their aim is to provide an economic framework that will allow Indian people a choice among the various possibilities of a mixed economy, and to protect rather than to repress their various needs, aspirations, and lifestyles.

The Applicant's Proposal

No complete estimate of the proposed pipeline's impact on Yukon society can be made until the final details of the route and the locations of construction camps and compressor stations are known. These uncertainties, however, do not preclude assessing some aspects of the proposals made by Foothills for programs specifically intended to reduce the negative social and economic effects of its project.

Foothills has made a distinction between the construction and the operation and maintenance phases of the project for the purpose of assessing impact, and it has a number of plans that, it argues, will reduce the impact of its construction phase. Containing workers in camps as a means of reducing worker-community conflict is one of them.

According to Foothills' plans, workers will be recruited in southern Canada, receive their pre-employment medical examinations and some orientation for the job in the city of recruitment, and then be flown to the Yukon. From the airport, they will be transported by bus directly to the work camps. These will be located away from existing communities and will be almost completely self-contained, with facilities in them for routine medical treatment, alcohol counselling programs, and recreation. The camps will include taverns from which non-employees will be excluded.

The workers will not be allowed to bring their families with them, their vehicles will be prohibited from the camps, and, when on rest leave, they will be bussed directly to an airport for transport south.

Workers on the Alyeska pipeline, who had at first been located in a camp a short distance outside Fairbanks, staged a successful rebellion against camp life and won the right to live in the city. With union support, they even gained housing subsidies. There is little indication that Canadian workers would rebel in the same way against camp life; the experience of camps at Fort Nelson and in northern Alberta did not reveal this sort of behaviour. On the other hand, proximity to an urban centre that offered the prospect of available housing could increase the possibility of this happening in the Yukon. Safeguards should be negotiated to prevent southern workers living outside the camps.

Another aspect of this combined containment and southern-hire policy was also discussed before the Inquiry. On the basis of the Alaskan experience, witnesses predicted that southern-hire would somewhat reduce the numbers of in-migrants who might otherwise arrive in the Yukon to seek employment on the pipeline, although, as discussed in Chapter 6, this number is likely to be far higher than the Applicant estimated. Witnesses also stated that the southern-hire and containment policies would probably prove insufficient to handle all the problems that will arise. One of these problems stems from Foothills' own prediction that 600 Yukon workers will be directly employed on construction. It does not seem sensible that their pre-employment medical examinations and orientation programs should take place in the south. Yukoners may be more likely than southern workers not to wish to live in a construction camp, and they are more likely to have automobiles that will enable them to commute to a camp from home or to visit nearby communities from a camp. In Alaska, it was found that experienced pipeline workers from the south were used to leaving their families behind when working on a job. However, local workers are likely to want to establish their families close to the camps, and the cost of doing so would probably be lower for them than for southern workers.

The second problem centres on containment of workers in camps as a mitigative measure. The employees of Foothills and its primary contractors will not be the only persons entering the Yukon as a result of construction. We have already referred to Foothills' low estimates of in-migration, but the relevant point here is that the workers coming to take or seek secondary and indirect employment will not be subject

to Foothills' containment policy. They will not have to live in camps or to leave their families behind, and they may have, as a result, a greater impact on local communities than the construction workers.

In addition, we note the absence from Foothills' calculations of any reference to the proportion of female employees on the project. Given the equal opportunity employment legislation in the Yukon, at the federal level, and in all of the provinces, one would expect to see a work force that is both female and male. The needs and influences of a work force composed of both sexes may be quite different from those of an all-male work force.

On the basis of these observations, it is apparent that Foothills is in the position of having influence over a narrowly defined group. Accordingly, the containment policy might be regarded as a desirable, but only partial, mitigating force on social impact. We see a danger in thinking that the only problems to worry about during the construction phase are those that relate to the construction workers themselves and to the restricted range of contacts they will have with the communities. Preparations and projections should take account, not only of southern construction workers, but also of those from the Yukon who may be directly employed on the project; of those holding or seeking secondary and indirect employment, whether they are Yukoners or outsiders; of dependants of these people; and of the impact of a whole range of economic problems, such as inflation, that the construction phase will create.

In contrast to the construction phase, when more than 2,300 workers will be employed on pipeline construction, the Applicant has plans for approximately 200 full-time permanent jobs during the operation and maintenance phase of the pipeline if the Alaska Highway route is followed. Although in-migration will not be significant during this second stage, should these jobs be filled by non-Yukoners, the increase in population would be substantial in some of these communities, particularly small communities, such as Beaver Creek, where 22 workers will be stationed. Witnesses at the hearings disagreed with Foothills' view that the impact of the operation phase on smaller centres, as well as on large ones, would be wholly positive.

Finally, there is the problem of the reaction of the Yukon economy to the bust part of the pipeline proposal. The Alaskan experience demonstrated the adverse consequences of building up facilities and services on a grand scale to respond to a boom period, followed by a reduced demand associated with declining activity.

Social Impact

Researchers who have studied the impact of the Alyeska pipeline on Alaskan cities told the Inquiry that many of the serious problems that occurred there during the period of construction had been evident before construction began. The examples they most frequently cited were housing shortages and deficiencies in the public utilities system.

This aspect of the Alaskan experience has some immediate implications for the Yukon. Where facilities or services need to be improved, pipeline construction will aggravate that need. We say, with certainty, that in-migration and the pressures associated with pipeline construction will increase the strain on existing facilities.

In the hearings before this Inquiry, many Yukoners mentioned facilities and services, such as the courts, that do not adequately serve present demand. The long-standing desire for a development of a comprehensive means of land use planning and the need to improve the standards and funding of child care services were also mentioned. These problems should be tackled before any development activity begins in the Yukon.

In some areas, where problems have been identified, solutions have already been planned. Mrs. Flo Whyard, executive committee member responsible for health, welfare, and rehabilitation, pointed out that an expansion of health facilities in Haines Junction and Beaver Creek has been planned to meet the expected demands of visitors to Kluane National Park. Implementation of these plans would be accelerated if the pipeline proposal is approved (43-5863-64). Foothills' consultant, Mr. Merve Miller testified at the formal hearings in Whitehorse that an increased population associated with the establishment of Kluane National Park had put a strain on existing school facilities, and that in-migration related to the pipeline would require a decision about a new school (2-343-44). Mrs. Whyard noted the "happy coincidence" that her department is already planning structural changes to the Whitehorse Correctional Centre, an institution that could well be overstrained during the period of pipeline construction (43-5872). Construction might hasten the implementation of many planned solutions to present problems, a fact that would, of course, have cost implications.

However, it is possible that some programs or facilities that are still in an early stage of planning or implementation may be postponed. The submission by Urban and Rural Systems Associates (URSA) about the

pipeline construction experience in Alaska described how some programs had been deferred because of the pipeline's competing demand for resources. In northern Alaska, for example, housing construction programs in small communities were postponed because of lack of funds and because of increased labour costs brought about by pipeline construction (URSA II-26). The Yukon Association of Social Workers made a similar submission, expressing concern for new programs involving Indian courtworkers and innovative methods of treating alcohol abuse, which might be eliminated without being given the opportunity to demonstrate their effectiveness.

Efforts to identify social problems requiring new solutions would be seen as a low priority in the face of pipeline demands. To lose these initiatives for the entire three-year construction phase would have serious long-term consequences. Services that are at present adequate to meet local needs may deteriorate in quality or be jeopardized during the construction phase. Both the Yukon government and many private citizens and organizations voiced their concern for maintaining at least the status quo of education, health services, and social service programs.

The failure to implement planned programs, or to continue the search for new responses to difficult social problems, the elimination of unproved new programs, and the reduction in quality of existing facilities and services will have serious consequences that cannot be quantified. Negative impacts of the sort described above will fall most heavily on the long-time Yukon resident. Persons living here before construction, and all those making their homes here afterwards, will be the ones who feel the effects of stinting long-term programs in favour of crisis management.

These problems may occur because resources have to be diverted to short-term construction-period emergencies, or because the influx of in-migrants may affect changes in a community's way of determining long-term priorities. We were told at the hearings that many newcomers will expect a higher quality or quantity of services or facilities than is offered in the Yukon. Witnesses at the community hearings spoke of the different perspectives on education that newcomers might have. Families intending to stay in the Yukon only a short time, say two or three years, would nevertheless be eager to ensure that curricula in the Yukon schools were similar to those in southern schools so that their children could transfer back to them easily. These concerns are not, of course, the same in all communities, but the fear that large numbers of newcomers will change local long-term priorities, and then leave before the implications of

these changes become fully known, was expressed in several places.

Another aspect of social impact that concerns us is the effect on Yukoners of plans implemented to deal with in-migrants. Strategies, such as limiting the supply of housing, would be a hardship for some categories of local residents, such as old people and others on fixed incomes. Here, however, problems could be avoided by such corrective measures as providing housing subsidies or special construction programs.

These general comments on social impact could be elaborated further by looking at particular areas where the effects of the proposed pipeline will probably be felt, but we cannot comment at length on all of the specific submissions made to this Inquiry. Only the most general outlines of problems that may arise during the construction and operation phases of the proposed pipeline have been put forward here, and even they must be viewed in the light of our earlier comments on the deficiencies of the data available. Nonetheless, some trends have emerged, trends that have implications for the research, regulation, and compensation that would have to accompany any pipeline construction, and that will be discussed in the following sections.

Health and Welfare

Throughout the Inquiry, there were many questions about the ability of medical facilities in the Yukon to cope with the influx of workers on the pipeline. The Applicant estimates that there will be about 480 construction accidents during the four years of the construction phase of the project, and that 95 of them may require hospitalization. The Applicant contends that the strain on existing facilities will not be great because it will provide health facilities in the camps, and because injured workers who require long-term care will be flown to southern Canada. A good deal of discussion centred on the capacity of Whitehorse General Hospital, the Yukon's major medical facility, to handle casualties among the construction work force.

Another issue in need of examination is the provision of medical care to operation and maintenance personnel and their families living in the smaller towns along the pipeline route. Some testimony suggested the possibility that, if an early response is forthcoming, this new demand on health services could result in the improvement of local health service. Another issue in need of further examination is that of motor vehicle and industrial accidents. The increased use of roads for construction traffic will coincide with the Yukon's

tourist season. In Alaska, during the pipeline construction phase, an increase in the number of traffic accidents was attributed to both an increase in alcohol consumption and the number of people driving. If this occurs in the Yukon, there would be an added burden on existing health and rehabilitation facilities and compensation schemes. Foothills did not adequately address these possibilities.

With regard to industrial accidents, Foothills has predicted the number of accidents likely to occur in its own operations, but it has not included in its estimates any suggestion of the increase in industrial accidents that may occur in other sectors of the economy as a direct or indirect result of pipeline construction. The movement of inexperienced people into jobs, combined with long hours and an overall increase in the number of people in the labour force, could have an impact on both the number and the rate of industrial accidents. This increase could also place extra strain on the Yukon Workmens Compensation Fund.

Pressure on medical personnel to carry out pre-employment medical examinations, a problem in Alaska, will be avoided, in part, by hiring in the south. The Yukon has a favourable ratio of doctors per capita, but the services of physicians are not uniformly available outside of the larger centres. The Yukon government has predicted that it will have to increase the numbers of public health nurses available because of a predicted rise in venereal diseases, among other things, during the construction phase of the pipeline.

None of the intervenors before us proposed an increase in the number of facilities dealing with stress-related mental illness. In light of the experience of Fairbanks residents during construction of the Alaskan pipeline, this omission may have to be reviewed. There, indicators of increased stress ranged from mild to severe.

Fairbanks, the main staging and supply centre for the Alyeska pipeline, is a city of small households, and its residents are mainly young, White, well educated, married, and fairly prosperous, according to a survey conducted by the University of Alaska's Institute of Social and Economic Research in 1976.

This survey reported that the economic gains of Fairbanks families were earned by spending more time at work and less time together as a family or in recreational activities. It may well be that workers attracted to pipeline work regard these trade-offs as part of the bargain for higher wages; some long-time residents of the Yukon may think the same way. On the other hand, there is evidence from Alaska that the trade-offs involved some forms of malaise and ill

health. The Fairbanks North Star Borough Impact Information Centre compiled data on a number of indicators of stress that are commonly used to gauge the mental health of a community. Two of the most striking indicators of increased stress were that the admissions of new patients to the mental health clinic increased between 40 and 50 per cent between July 1974 and October 1975, and that the total number of divorce actions increased 100 per cent between January 1973 and January 1975. Of course, these increases could be, at least in part, a function of the increased numbers of people attracted to Fairbanks by pipeline activity; the centre, however, concluded that the increase probably reflected qualitative factors as well. The increased caseload at the mental health clinic was attributed, in part, to stress arising from the changes in the community that accompanied pipeline construction, to the challenge of changing values brought about by the experience, and to confronting decisions of a different kind (AHPP 556-7).

The findings of the Fairbanks North Star Borough Impact Information Centre deal with other signs of family and personal breakdown. The social services had to cope with an increased number of children left alone for long periods at a time. A few cases were recorded of single parents who worked on the pipeline requesting foster care for children for as long as six months. Teenagers in Fairbanks experienced greater neglect as a result of their parents working longer hours or their complete absence from home on pipeline jobs. The Fairbanks centre observed that the number of runaway teenagers brought to the attention of the authorities had almost doubled.

All of the witnesses who spoke to the Inquiry on these issues suggested that the Yukon must begin immediately to prepare to meet similar problems. It was proposed, for example, that foster home and temporary care facilities be increased before pipeline construction to provide time to recruit and train foster parents. The Yukon government has pointed out the particular difficulty of locating Indian foster parents for the Indian children in its care.

Some kinds of social services are oriented to the prevention of distress over the long term, as well as to the provision of a necessary facility in the short term. One of these services is day care. Day care in the Yukon may be in the same state of unpreparedness as were the Fairbanks centres at the commencement of pipeline construction there. There is no ordinance in the Yukon that establishes acceptable minimum standards for day-care facilities and programs. Day care does not receive direct on-going funding from the government, and in some cases day-care workers receive only the minimum wage. There are five centres

H. J. Woodside parlour and kitchen on Church Street in Dawson City, 1902 (Public Archives of Canada)

The Savoy Hotel in the gold rush community of Fort Selkirk (Yukon Archives)

Cabins inhabited by Indian families at the north end of Dawson City, 1944 (Public Archives of Canada)

An illicit still on the Klondike, 1904 (Public Archives of Canada)



providing full day care in Whitehorse, one in Faro, and one at Watson Lake. None of the other communities along the Alaska Highway has a full-time day-care centre.

The Alaskan experience vividly illustrates the difficulty of trying to establish these facilities, once an economic boom is underway. There, existing day-care centres were not able to handle either the number of children or the longer hours of care required of them by parents working in pipeline-related jobs. Salaries of day-care workers were not competitive with pipeline-related activity, and the centres could not keep or replace good staff. Increased operating costs caused by inflation made both the establishment of new day-care centres and the cost of day-care prohibitively expensive. Attempts to establish new centres, including efforts by churches and other non-profit groups, were frustrated by high rents or by the unsuitability of available buildings. Witnesses appearing before the Board recommended that steps be taken now to provide adequate day-care centres in the Yukon, and subsidies to parents where necessary.

Education

Yukoners expressed concern in both the formal and community hearings about the continuing ability of communities to provide quality education, and the Yukon government's submission stressed its interest in maintaining the present pupil-teacher ratio, which, at 17.5 to 1 is the lowest in Canada. Witnesses from many of the smaller settlements are hopeful that, as a consequence of the project, population would increase sufficiently to warrant more grades being offered in the local schools. Students could then remain at home longer, before having to move to larger centres for further schooling.

Clearly, the impact of the pipeline on education will vary from community to community, and we suggest that a flexible planning approach related to the schools will prove most effective. Flexible planning could well serve an additional purpose in helping to avoid the mistake made in Alaska of building more classrooms than were required.

Housing and Community Planning

Little evidence was presented to the Inquiry that would permit an accurate assessment of the proposed pipeline's impact on housing or community planning.

Basically, the Applicant's position is that there is sufficient slack in local rental accommodation, and enough lots now under development to meet the anticipated housing demand of their personnel and of other workers employed in pipeline-related activities.

The Applicant also considered the general question of the housing market in Whitehorse and in the communities along the proposed pipeline route and concluded that Whitehorse should be able to absorb the impact of pipeline construction on housing without difficulty. This view was supported by the Whitehorse Home Builders Association.

The Applicant has relied solely on its own in-migration figure to measure the capacity of the housing market to absorb newcomers. What Foothills does not take into account is that its major scheduled construction spreads are planned for the summer, coinciding with the annual influx of tourism. The reported vacancy rates of 15 to 20 per cent are not seasonally adjusted.

The URSA panel submitted evidence to show that many southerners who come to take secondary employment will be accustomed to a higher standard of accommodation than they will readily find in Whitehorse, and that, in the area of high quality housing, Whitehorse is lacking.

At the opposite extreme will be transients, who will put acute pressure on the limited number of available low-cost facilities, such as hostels and camp grounds. These in-migrants will not be in a position to take advantage of the availability of developed lots or rental accommodations. During the Alyeska construction, numerous job-seeking transients, families, and workers-in-transit travelled through the Yukon on their way to Alaska. This time, however, the Yukon will be the destination of many of them. The Applicant does not intend to contribute to an increase in the present level of inexpensive shelter because it feels that demand would quickly rise to the level of whatever supply is available.

The social welfare branch of the Government of Yukon takes a relatively tough view of transients – although it does offer them minimal short-term assistance. The Yukon government does not propose to relax its policy of being firm with transients, and it proposes to advertise its policy in the southern press.

The Alaskan experience demonstrated that the volunteer sector was hard hit by the demand for emergency accommodations of the compassionate type. The Yukon government recognizes that assistance to the volunteer sector, as well as direct government involvement, will be necessary to plan and

provide transient shelter, and that such assistance will help prevent the diversion of government resources from other services that it provides to Yukon residents.

It should be recalled that in the past, the Yukon has been beset by housing shortages so severe that a substantial portion of the Whitehorse population lived in substandard residences, tents, or temporary structures; a few still do. If the Alaskan experience is valid for the Yukon, many in-migrants can be expected to arrive in mobile homes and campers. They did not create squatter areas in Alaska, but they did engender a proliferation of substandard accommodation, overflowing the spaces available for mobile homes, and aggravating a general shortage of parking facilities.

There appears to be some community resistance to mobile home developments in Whitehorse, but a large mobile home park is now being developed, and the concept does represent a potentially important means of relieving pipeline-induced housing shortages.

Assuming that the levels of in-migrants have been underestimated, it would prove advantageous to identify suitable areas for the accommodation of trailers and mobile homes, and to consider establishing a camper permit system that would enforce time limits. Reliance on trailer parks and other short-term measures to handle a temporary situation should not, however, be permitted to distort long-term community planning and development or to violate appropriate space and aesthetic standards.

The Applicant's Proposals for Accommodation

The Applicant is prepared to look after housing its workers during both the construction and the operation and maintenance phases of the project. The Applicant intends to establish self-contained camps that are removed from existing communities to avoid social disruption. The camps themselves will be composed mainly of mobile trailers that will be used for sleeping, dining, and recreation.

We have mentioned earlier the problem of preventing workers, particularly Yukon residents, from housing their families near the camps. There is no easy solution to this problem, except by limiting the access of private vehicles to the work site or making camp residence a condition of employment. The Yukon government has predicted that family groups might exert pressure to extend the 14-day camping limit of government-operated parks.

Another issue the Applicant has not raised is the aesthetic standards of camp facilities and how the facilities are to be treated when the construction period is over. The use of trailers may provide the easiest

means for restoring a camp site to its previous condition. Recreational or other buildings might be constructed in such a way that they continue to serve a useful purpose after the camp closes. Involvement of nearby communities in the design of camp facilities would allow Yukoners the chance to participate in designing buildings that they can subsequently utilize.

During the operation and maintenance phase, Foothills has indicated that it will construct rental and owner-occupied housing for its employees, where necessary, and that, in planning for this housing, it will consult with appropriate community and government institutions. Foothills has already established the principle of local consultation by holding discussions with the Yukon government and community officials. The practice should be continued on a systematic basis to resolve a number of potentially serious problems that were mentioned during the course of the hearings. These include the availability of serviced land; the integration of Foothills' housing with local community plans and zoning by-laws; the avoidance of company enclaves or subdivisions in or on the outskirts of existing communities; and the design and physical layout of housing and operating facilities to complement existing facilities.

The Applicant has tentatively scheduled the construction of accommodation for its permanent personnel for 1980-81, overlapping with the years of peak pipeline construction. We agree with the observation made to us that it would be beneficial to the local economy, and would help to reduce the strain placed on existing housing, if construction of employees' accommodation were completed prior to the peak period of pipeline construction. Foothills is willing to carry on its construction in the smaller centres by phases. This process would allow the building to continue over a period of years, and to be carried out by local contractors, rather than having it done all at once by a southern firm.

Community Planning

There are few direct references to community planning and settlement land use in the Applicant's proposal, although Foothills has recognized the need to take local conditions into account in planning the housing of its permanent employees. We have already suggested the advisability of advance planning and of construction by phases of any dwellings that may be needed for permanent staff.

The Yukon does not at present have an overall plan for land use, although the need for such a plan has been recognized for some time. One problem arising from the absence of a plan is the need to expand settlement

boundaries to accommodate new dwellings. The problem of boundaries is somewhat different from the related issue of actual physical availability of land, a problem that exists in communities such as Teslin and Destruction Bay, neither of which has space in which to expand. In communities where land is available, there will have to be consultations with the Yukon government about the provision of services, such as sewage, water supply, and garbage collection. The community profiles in the appendices to this report demonstrate that these services are not uniformly available to the residents of settlements along the proposed route.

The implications of there being differences between services in new company-built housing and those now available in some communities will have to be sensitively explored on a community-by-community basis. So, too, will the differences between any construction associated with the pipeline project and that already planned under the Yukon government's housing provisions or improvement programs. Foothills' priorities should not be permitted to prevent or hinder implementation of plans already established at the local level.

Foothills should also be able to ensure that housing and other facilities in its operation and maintenance program fit into the environment of the community and do not create a segregated enclave for its own personnel. Careful attention must be given to such matters as the setting and design of housing and other facilities within the communities. Special care should be taken in communities like Dawson, where historical associations have been and are still being developed. Foothills' participation in community life could include encouragement of local non-profit housing associations, of local building and maintenance contractors, and possibly the sponsorship of community improvement programs for privately owned houses.

Socio-legal Services

Alcohol and Related Problems

Alcohol abuse and related problems are already very grave in the Yukon. It is unrealistic to expect that the Yukon communities can undergo the increased pace, cost, and strains of pipeline construction without experiencing an increase in existing problems.

As indicated previously, witnesses at both the formal and community hearings were extremely skeptical of the Applicant's use of construction camps as a way of curtailing worker-community interaction, or of

southern-hire as a means of preventing an influx of workers in search of jobs, or of numerous transients.

Widespread concern surfaced that failure of either of these policies would result in alcohol-related disruptive incidents in nearby communities, including sexual exploitation of females, and that, in general, the alcohol-related problems of Yukoners would be exacerbated whether or not they were directly employed in pipeline construction. Furthermore, Foothills felt that it could act upon only the isolated, more serious incidents, when they were brought to its attention or to the attention of the responsible socio-legal agencies. Foothills doubted it had the legal right to force an undesirable dismissed worker to leave the Yukon. (2-325-31).

Nor was much confidence expressed that the provision of on-site tavern facilities, and company-run diagnostic, treatment, and referral services would enable the Applicant to prevent or deal with employees' alcohol-related problems, even within the camps.

The Alaskan experience lends credence to these fears. Evidence given to this and other inquiries points to a dramatic increase in alcohol consumption and a squandering of pipeline wages on both alcohol and drugs when pipeline activity began. In particular, Alaskan Indians in both Fairbanks and outlying Native villages suffered from the effects of increased alcohol abuse and the social disruption that accompanied it.

In Canada, Indian people are already disproportionately affected by alcohol abuse and its negative social, economic, and medical consequences. The situation is credited partly to their position outside the dominant society's socio-economic base and isolation from their traditional subsistence lifestyle. In the Yukon, this situation could be aggravated by pipeline activity.

Young people appear to be particularly vulnerable to alcohol abuse. A Yukon government study has indicated that, of the drinking population over 15 years of age, 13.5 per cent are consuming alcohol at a dangerous level and that one out of every 19 Yukoners is an alcoholic. It is expected that it will be mainly young, highly mobile people who come to the Yukon for pipeline work, and this group will require particular attention from agencies dealing with alcohol addiction and related problems.

Crime

Foothills has acknowledged that there is a correlation between economic activity and crime (Exhibit 3, *Application of Foothills (Yukon)*, Vol. 5A., p. 5.17),

but predicted there would be no significant increase in crime as a result of pipeline activity. Studies of the Alaskan experience partly support Foothills' contention that impact studies do not necessarily prove a cause-and-effect relationship. The URSA panel cautioned against relying heavily on the Alaskan figures, which show rather dramatic increases in assault and property crimes, because they are due, in part, to changes in the laws, and because there was no expansion of the police force to deal with the increased population during pipeline construction. The increase in the number of crimes in Fairbanks may merely have reflected the increase in the population.

So far as crime in the construction camps is concerned, Foothills has said that it will provide for internal enforcement of its regulations and permits. Furthermore, Foothills will cooperate with the RCMP by giving the force access to accommodation in the camps and communications facilities (2-213-14). Foothills will assume the costs of socio-legal services, when they are traceable to project activity, and it suggests that the RCMP would be summoned only when its internal force cannot handle an incident. For a number of reasons, we think consideration should be given to increasing the RCMP's role in the camps, either by a detachment on site or by regular patrols by a local detachment. Because the RCMP has a large force of trained officers who could fill vacancies in the Yukon, we do not think there will be a repetition here of the difficulty experienced in Alaska of replacing officers who left the police force to take higher-paying security jobs in the camps.

A greater cause for concern is the expected increase in crime that may be generated by workers away from camp during their leisure and by the general effects of a boom economy on the Yukon community. More cash, more young in-migrants, and increased use of drugs and alcohol may all lead to an increase in crime. Planning need not await conclusive analysis of all the factors. The crime rate in the Yukon is already four times the national average, and crimes against property, against the person, and impaired driving are particularly common. The high rate is attributed to the relative youth of the community, its mobility, and its alcohol consumption rate, the highest in Canada (4-659-61).

In 1975 and 1976, 90 per cent of deaths investigated in the Yukon were directly or indirectly related to alcohol, and most activity coming to the attention of police involves alcohol. The Yukon is not unique in this respect. The final report of the LeDain Commission of Inquiry into the Non-Medical Use of Drugs (1973) confirmed the relation between alcohol and crime elsewhere in Canada.

A recent preliminary study of admissions to detoxication and rehabilitation centres and of the racial breakdown of cases served by the Yukon's socio-legal agencies has demonstrated that the Indian people are disproportionately involved in criminal or quasi-criminal behaviour. Specifically, people of Indian ancestry in the Whitehorse prison in 1975-76 comprised 161 out of a total of 315, or 51 per cent of the inmates for that year. These 161 Indian inmates were status Indians; 80 per cent of the juveniles admitted to Wolf Creek Juvenile Training Home in 1975-76 were status Indians, and 5 per cent were non-status Indians. In 1974, Schmeiser found a similar pattern of disproportionate incarceration of Indian offenders across Canada. He also found that, in the Yukon, there was a significant number of Indian offenders incarcerated for default in payment of fines.

Mr. David Joe, representing the Council for Yukon Indians, told the Inquiry of the council's growing concern that pipeline-associated activities would lead to further deterioration of this situation in the Yukon. Many other persons expressed concern at the community hearings that there would be an increase in crimes against individuals, including robbery, assault, and murder, as well as more cases of rape and exploitation of females. We cannot, on the basis of the Alaskan experience, precisely identify the link between increased criminal activity and pipeline construction, but these concerns are by no means groundless.

Socio-legal Services

A wide range of specific suggestions were made at the hearings for helping existing social agencies and legal institutions to deal with a rise in alcohol abuse, crime, and related social problems. Some socio-legal services, such as probation services and court workers, will experience heavier strains that can be directly traced to a large influx of people. Other demands are not so readily or so reliably identified at this time. A comprehensive approach is needed for the development of programs to handle crises, and to identify both long- and short-term measures that should be implemented. There are many indications that the negative effects of pipeline construction, especially the effects of increased alcohol abuse and increased crime, will fall more heavily on the Indians of the Yukon than on the Whites.

The massive dislocations that would result from immediate construction of the proposed pipeline might quickly undermine the gains that Indian communities have made in the gradual stabilization of their social and economic life after the disruption caused by and following construction of the Alaska Highway. These dislocations might also undermine the desire of the

Indian community (within the framework of a land claim settlement) to organize and determine its own plans and goals for development (33-4022).

Measures that amount to more-of-the-same services are unlikely to assist in dealing with this problem. Mr. Daniel Johnson, chairman of the Council for Yukon Indians pointed out that the expansion of southern-oriented social agencies and programs would emphasize the Indian's subordination and inability to participate effectively in the delivery and direction of social services (4-564-65). He also said that attempts to hire Indian social workers would not be totally successful. There are so few trained people at the present time that they would be overwhelmed by the task. This is clearly another area in which time for training, recovery, and consolidation is necessary.

estimated by various witnesses to be anywhere from six months to more than ten years. We should like to point out that some of the research that we recommend will take a minimum of three years before any meaningful results are produced; this prediction is based on the experience of similar research projects in northern Quebec and elsewhere.

The people of the Yukon cannot be asked to bear unassisted the negative effects of the proposed pipeline. They should be compensated for any damage that can reasonably be traced to the construction and operation of the pipeline, and means must be provided to assist Yukoners in planning and gauging the success of their response to pipeline development. From the brief survey we have offered of particular sections of Yukon society, it is clear that more than one kind of compensation may be necessary.

Individuals or groups that are directly and immediately injured by construction or operation of the pipeline will, of course, obtain restitution. At another level, we can predict an increase in the number, if not the rate, of construction and motor vehicle accidents, and of harm to people as the result of criminal activities, simply because there will be more people in the region. We think that this sort of damage is tied sufficiently to the pipeline activity so that there should be compensation drawn from the increased revenues generated by taxation of pipeline property. Some forms of damage are already covered in existing programs, such as Workmens Compensation and compensation to victims of crime. Some, like the harm caused in motor vehicle accidents, could be dealt with by establishing and funding an accident claims fund, such as exists in other jurisdictions, to ensure that uninsured drivers do not cause unnecessary financial hardship.

It is in the area of unspecified damage, where quantifying losses is difficult, that the social impact of the pipeline will be most keenly felt. The strains placed on family life during the construction phase; the harm to a community when alcoholism reaches a level that saps self-reliance or ends initiative; and the damage to a family or community when its livelihood, culture, or diet (all of which may be associated with the harvesting of renewable resources) are interfered with – these are all possible social costs of development. They present difficult problems of tracing cause and effect and of quantifying damage but, to our mind, it is beyond question that these kinds of deep and lasting hardships should receive compensation. In Chapter 11, we suggest a means for accomplishing that objective.

Representations from the Government of Yukon and numerous intervenors in the hearings stressed the fact that dealing with pipeline impacts would increase

Conclusions and Recommendations

We have already said that we consider Foothills' predictions of negative impact on Yukon communities from pipeline construction and operation to be unrealistic and low. It is our view, based on the testimony and briefs submitted at both the formal and community hearings, that the pipeline proposed by Foothills would have a substantial negative impact on Yukon society. The deficiencies in data, greater in some areas than in others, but nonetheless an ever-present feature of our attempt to assess this impact, do not permit us to deal in great detail with every area in which we fear some damage can be expected. Such information as is available, however, does leave some clear impressions. Yukoners rightly fear an increase in abuse of alcohol and its related problems, an increased load on the existing programs caused by the need to deal with ordinary demands as well as emergency situations, and an increase in the stresses that are part of life in an increasingly industrialized society. Worries about disruption of life in the smaller communities, and of changing patterns of land use that involve the harvesting of renewable resources, cannot be dismissed as groundless, although it is on this last subject that we are most hampered in our predictions by the lack of information.

We have also been impressed at the hearings by the Yukoners' own confidence that, with time to plan carefully, many of the negative impacts of the proposed development can be contained and mitigated. The amount of time required to devise and implement strategies to deal with the negative – and, of course, the positive – consequences of a pipeline has been

demands on the government sector to expand and improve its existing services and facilities. In view of our conclusion that Foothills has underestimated the negative impact of the proposed pipeline, we do not gainsay these statements that there will be increased demands on the government, and we add that the private and voluntary services will be similarly strained.

It has been pointed out to the Inquiry that increased need or demand cannot, in many cases, be met by simple increases in personnel or equipment. To plan for social impact on the assumption that all existing services are good, and that more of them will be more helpful, is too simplistic. The more-of-the-same approach may perpetuate and emphasize any misconceptions about what is socially important and possible. The remarks offered above on the subject of country food indicate, for example, that more unemployment insurance or welfare for persons now officially regarded as unemployed would be unresponsive to the interests of at least some people designated in that way. It may also lead to a greater centralization of services when decentralization may be the more appropriate response. At the public hearings, there was sentiment expressed against the growth of bureaucracy as a consequence of the project. Reconsideration of the social services that will be required by the pipeline proposal could offer a unique opportunity for their organization on a less centralized basis.

It is equally important, in our view, not to attribute all aspects of the increased demand for social services solely to pipeline construction. The extension of traditional facilities and services may simply be accelerated, rather than caused, by pipeline construction, and we caution against attributing to Foothills the full cost of providing such additional services. To do so would be to divert attention from the normal responsibilities of government, and to burden the pipeline project unreasonably.

As well as warning against some possible problems in the allocation of resources to deal with social impact, we should like to mention here some approaches to planning that were raised at the hearings, and which merit consideration.

An approach to planning that identifies an overall problem and discovers how a particular change will affect every aspect of it would appear to be desirable. Testimony from the hearings provides some examples of this approach. If, as predicted, there is an increase in motor vehicle accidents during the construction phase – because of the increased numbers of cars, increased alcohol consumption, or for other reasons – a number of results may follow. There will be an increase in the

use of hospital facilities. Obtaining redress for crumpled fenders or broken limbs may involve resorting to a small claims court and greater demands on a motor vehicle accident claims fund or private insurance. Any increase in crime, particularly an increase in assaults, such as happened in Alaska, would activate a chain involving not only the police, courts, and corrections facilities, but also the means of caring for, and compensating, the victim in medical facilities and courts, whether by government victim-compensation schemes, or private insurance. Planning that is directed from the outset to identification of chains of this nature will result in the creation of programs that meet a range of interrelated needs, rather than programs that tackle problems as though they were separate and distinct.

The problems for resource diversion and changed priorities, which we already considered, are by no means easy to solve. One aspect of social service planning that could be explored is that of making distinctions between plans required to deal with short-term crises and those designed for the long term. Dr. Baring-Gould, on the basis of his observations of the experience of Valdez, Alaska, gave an example. During the construction activity there, land use controls on mobile homes were frequently relaxed on an *ad hoc* basis because of the city council's sympathy for personal appeals. The result was a failure of long-term planning and a not wholly satisfactory short-term solution. He described the short-term alternative of allowing mobile homes in parks and then of requiring them to be removed by a specific date, thereby incorporating them into the long-term plans for the area. Other examples from the testimony we heard included distinguishing permanent and temporary positions in an expanded work force; using portable classroom units to meet a temporary demand, rather than building new schools; and providing mobile facilities along the construction route rather than permanent ones. All of these examples would help guard against long-term policies that could not easily be changed, policies that would require on-going funding in areas responsive only to short-term needs.

In identifying matters in need of immediate attention, it should not be only the dramatic quality or the magnitude of a problem that commands attention. Problem-solving and self-help in the Indian communities are examples of situations in which great patience and much time are needed; whereas the development of land use and housing policies is an example of a problem which, seemingly minor, grows more complicated as it is tackled. Such concerns cannot be easily handled on an *ad hoc* basis, as rental subsidies or the purchase of equipment can.

The identification of problems that require long-term solutions should not remove the necessity to decide upon priorities among existing, planned, or desired social programs, nor should it remove the need to integrate crisis-oriented planning with the long-range programs.

We think that it is essential to ensure that diverse interests are represented within agencies that will be determining priorities. This principle of participating in determining priorities, if established early, would tend to favour the long-term Yukon resident over the in-migrant. The principle of ensuring equitable representation at the community level is an important one.

Finally, we believe that one of the most critical needs that should be met as soon as possible, whether or not the government approves construction of the proposed pipeline, is the establishment of a sound data base for the Yukon. Such a data base would assist decision-making on other possible developments and it would enable proper monitoring of any proposal that may be implemented. This data base should, of course, include the information about hunting and the harvesting of renewable resources that was recommended above as a high priority.

We do not attempt here to assign priorities to all the other recommendations for research that have been made at the hearings. Nor are we sure that we have before us all the suggestions for the kinds of data that would be needed to undertake a comprehensive plan of research. We suggest, however, that a research program to provide a data base for the assessment of social and economic impacts be initiated, and that the experience and advice of the Alaska impact information centres should be sought in its preparation. It is our view that the data should be gathered by an independent group unrelated to any government or agency, or to Foothills. Ideally, to secure its independence, the centre could be financed on a long-term basis from the Heritage Fund that we recommend in Chapter 11. Because the centre would be independent, it would make no policy statements based on the material and information it collects.

In our estimation, an independently funded and operated Yukon Impact Information Centre would have many advantages. It would have a longer life than any agency established solely to monitor and regulate the pipeline, and it would therefore be a fertile source of information for the evaluation and monitoring of other developments that may be proposed in the future. Such a centre could also offer an extremely valuable perspective on the long-run impact of a pipeline, or any other development, including the effects of social and economic programs established to deal with the pipeline's effects. Its independence would ensure that information would be accessible to all groups concerned with the project. The centre should restrict its activities to obtaining and to organizing factual material. Policies and conclusions, based on information supplied by a trusted and independent source, would be subject to less criticism than data provided by a partisan agency. Debate and decision-making could then concentrate on the substance of the issues. Conceivably, such a centre, independent of government or private industry, could also play a useful role in training members of the community in research methods.

We do not expect that the existence of an independent information centre would prevent specialized research by any other group or institution. Where appropriate, the results of such independent research could become part of the data base available to the centre, especially if advance consultation has ensured compatible research methodologies. The regulatory agency could make its studies available to the public through the Yukon Impact Information Centre.

Deciding the information to be gathered is a task that demands both expertise and an understanding of the Yukon. We recommend that the independent Yukon Impact Information Centre have a board of directors that reflects, in an equitable manner, the diversity and variety of Yukon society. It is particularly important that urban and rural areas, major ethnic groups, private, commercial, and voluntary sectors, and government are all represented on its board.

The area now known as the Yukon has been occupied by Indian and Inuit peoples since time immemorial. Many witnesses referred to the archaeological evidence that Indian people have been living in the vicinity of Old Crow for 30,000 years.

In most of the Canadian west, the federal government has entered into treaties with Indian tribes. The treaties were designed to extinguish Indian aboriginal title in exchange for reserves, annuity payments, and certain rights and services. No treaties have been made with the Indian people of the Yukon nor with the Inuit. They have never been compensated for the rights assumed by non-Indians in this region.

The Yukon Native Brotherhood formally presented a statement of the Indian land claim to the federal cabinet on February 24, 1973, in a document entitled, *Together Today for Our Children Tomorrow*. The Yukon Association of Non-Status Indians and the Yukon Native Brotherhood (representing status Indians) have jointly formed the Council for Yukon Indians to negotiate with the federal and territorial governments on behalf of all Yukon Indians. Both governments agreed in 1973 to participate in negotiations to settle the claim. Progress has been made. Representatives of both the federal government and the Council for Yukon Indians testified before this inquiry that they anticipate a draft agreement-in-principle before the end of 1977.

The Council for Yukon Indians and the majority of Indian witnesses at the community hearings expressed grave concern about the impact of a pipeline on their lives. They have stated their view that construction of a pipeline before the settlement and implementation of the land claim would seriously prejudice the achievement of a just settlement.

It is the view of this Board that the Indian claim to aboriginal title in the Yukon is clear and valid. A just settlement of the claim could lay the foundation for the economic and social development of Indian people in this region of Canada. A just settlement could also promote greater equality within Yukon society, and facilitate the development of greater self-government for all Yukoners. The Board is concerned that these goals not be prejudiced by the proposed pipeline, or by any other externally justified development project.

Indians and Inuit in the Yukon

The Yukon is part of the traditional territories of three Native language groups: the Inuit, the Athapaskans, and the Tlingit. Figure 4 depicts the linguistic divisions in the Yukon.

The north slope of the Yukon, which drains into the Beaufort Sea, was Inuit land. Although there is at present no resident Inuit population there, the area has been included within the land claim of Inuit Tapirisat of Canada and within the recent regional Inuit claim of the Committee for Original Peoples Entitlement. *Together Today for Our Children Tomorrow* specifically recognized the area as Inuit and beyond the scope of the Indian claim (p. 66).

The Indian people of Fort McPherson, Northwest Territories, have a registered group trap line in the northeastern Yukon. This area appears to be the only part of the Yukon used by a non-resident Indian population.

Treaty maps published by the Government of Canada indicate that the southeastern corner of the Yukon is covered by part of Treaty No. 8. Representatives of the federal government have agreed that this is an error. Indian people with traditional rights to that area did not participate in the signing of Treaty No. 8.

The terms "status Indian" and "non-status Indian" derive from the definition of "Indian" in the federal Indian Act. The distinction has been rejected by the Indian people of the Yukon, and the land claim has been put forward jointly by both groups.

The possible pipeline routes discussed before this Inquiry – the Alaska Highway route, the Klondike Highway route, the Tintina Trench route, and the Dempster lateral – are completely within the areas of the Yukon that are subject to the Indian land claim made by the Council for Yukon Indians. No section of any of the routes goes through an area where Indian land claims have been settled, because no settlements have been made in any part of the Yukon.

There are twelve Indian communities in the Yukon: Carcross, Carmacks, Champagne-Aishihik (Haines Junction), Dawson, Mayo, Old Crow, Ross River, Selkirk (Pelly Crossing), Teslin, Whitehorse, Liard, and Kluane (Burwash Landing). The relationship of these communities to non-Indian settlements varies considerably. Old Crow is an Indian village located far from any non-Indian community. Liard Indian Village is located about eight miles from the town of Watson

Lake. Ross River is physically one community, but there is an area of exclusive Indian residency in one clearly definable part of the settlement. The same is true for Whitehorse. All settlements with Indian and non-Indian residents have an area of apparently exclusive Indian residency, although certain communities, such as Carcross, are substantially integrated.

The history of the Indian settlements is more complex than one might have expected. Traditional patterns of land use did not involve permanent settlements. Some early fur trade posts became village sites, but many of them have now been abandoned, and the Indian communities have moved to other locations. Indian settlements along the Yukon River route between Whitehorse and Dawson served the river traffic. With the construction of the Klondike Highway in the early 1950s, the river route was abandoned and the Indian communities moved away.

Bishop William Bompas of the Anglican Church was concerned with protecting Indians by establishing reserves that were isolated from White communities. He petitioned the government for a reserve at Lake Laberge, and one was established on July 13, 1900, by federal order-in-council. In a second order-in-council of September 1, 1900, six additional areas were set aside, and on June 4, 1904, another area was set aside in the same way. These early reserves did not settle the Indian population into permanent villages, and even the fact that reserves had been established was largely forgotten in the Yukon until a few years ago. Various other pieces of land have been set aside in the intervening years, usually to protect new village sites.

The federal Department of Indian Affairs and Northern Development recognizes six Indian reserves in the Yukon as defined by the Indian Act. In addition, there are lands that have been "set aside" or withdrawn from any other allocation. Indian Affairs applies the land management rules of the Indian Act to these lands. There is a third category of lands, residential lots in communities such as Dawson, that have been purchased by Indian Affairs for Indian housing.

The present Indian villages were typically settled by the bands and extended family groups of the region, but they do not represent the continuation of traditional band structures. Some have been relocated more than once. Their economic base was altered by the fur trade, and altered again when the fur trade economy was itself undercut by the decline in fur prices after World War II. This decline coincided with the construction of the Alaska Highway, a project that brought dramatic changes to the southern Yukon communities in the 1940s and 1950s. Only Old Crow

has remained isolated from the influx of non-Indians and the booms and busts of the Yukon economy.

Old Crow is consistently recognized as an exceptional community, proud and self-reliant. The people depend upon the resources of the drainage area of Porcupine River and particularly on Crow Flats. They trap muskrats to obtain furs to sell and they hunt caribou for meat. They fear that oil exploration, and the construction of new roads and pipelines, may destroy their economy by affecting the animals. Although there is disagreement about the extent of the Indian land-based economy in the southern Yukon, there is no dispute that the people of Old Crow live largely off the land.

One of the frustrating aspects of the present situation is the difficulty in ascertaining, with any precision, the nature and scope of the Indian economy today in southern Yukon. Present patterns of land use and subsistence living have been the subjects of extensive studies by the Inuit and Indians of the Northwest Territories, northern Quebec, and Labrador. But the Yukon, like Alaska seven or eight years ago, is moving toward a settlement of the land claim without adequate data on the present land based economy.

The Indian view of economic development, as depicted in *Together Today for Our Children Tomorrow* and as described to us in the community hearings, does not focus exclusively on a revitalization of the traditional land-based economy. We do not suggest that the land-based economy today is insignificant, either economically or culturally, but we note the emphasis that is placed on local small-scale commercial activities such as stores, construction companies, and tourist services, which serve both Indians and non-Indians. Clearly the Indian people are looking toward a mixed economy for their communities, an approach that gives them the widest range of possible choices. A traditional or a non-traditional life is possible for the residents of most Indian settlements, and the Yukon economy need not be polarized between a land-based economy for Indian settlements and an extractive and service-oriented economy for non-Indian settlements.

The Background to the Indian Land Claim

The first English statutes that apply to the area now called the Yukon were Imperial statutes of 1803 and 1821. They referred to the area as lying within "the

Indian Territories". In December 1867, the Canadian Parliament petitioned the Queen for the transfer of Rupert's Land and the North-Western Territory to Canada: the latter area included the Yukon. Parliament pledged that:

... the claims of the Indian tribes to compensation for lands required for purposes of settlement will be considered and settled in conformity with the equitable principles which have uniformly governed the British Crown in its dealings with the aborigines.

That pledge was made a term and condition of the transfer of the North-Western Territory to Canada in 1870. The Dominion Lands Act of 1872, the first legislation dealing with the sale and disposition of federal crown lands, provided that:

None of the provisions of this Act respecting the settlement of agricultural lands, or the lease of timber lands, or the purchase and sale of mineral lands, shall be held to apply to territory the Indian title to which shall not at the time have been extinguished.

In 1899 a section was added to that Act granting the power "upon extinguishment of the Indian title in any territory or tract of land" to make grants of land to persons in actual peaceable possession of land in that area at that time. The first section was dropped from the Act in 1908, the second in 1950. In 1973, Mr. Justice William Morrow of the Supreme Court of the Northwest Territories ruled that the condition in the transfer of the North-Western Territory was in the nature of a constitutional obligation.

The practice of signing treaties with Indians to acquire land was legally established for what is now Canada by the Royal Proclamation of 1763. The government of Canada generally applied the treaty policy to both Rupert's Land and the North-Western Territory after they were transferred to Canada by England in 1869-70, in compliance with the conditions of the transfer. But parts of what were Rupert's Land and the North-Western Territory lack treaties. The Yukon is one of those exceptions.

The major treaty period ended in Canada in the 1920s. Thereafter Indian land claims were treated as a closed chapter of Canadian history, although major non-treaty areas still existed. The Indian people were not able to influence government policy successfully on this question in the 1930s and 1940s, but the issue returned to public prominence after World War II and particularly in the last decade.

In 1946 the United States Congress established the Indian Claims Commission to settle outstanding Indian land claims. The Special Joint Committee of the Senate

and House of Commons of Canada on the Indian Act, which sat in the late 1940s, recommended that a similar commission be established here. The recommendation was repeated by the Special Joint Committee of the Senate and House of Commons on Indian Affairs, which met a decade later. In the 1960s the idea was adopted as official policy by both the Liberal and Progressive Conservative parties. Two claims commission bills were introduced into the House of Commons by the Conservative Government of Prime Minister John Diefenbaker. But the bills were unsatisfactory and the issue proved to be of marginal interest: no commission was then established.

In 1968 the Tlingit and Haida Indians of the Alaska Panhandle were awarded \$7.55 million by the United States Court of Claims in settlement of their land claims. These groups are related to the Tlingit and Haida of the Yukon and British Columbia. In 1969 the government of Prime Minister Pierre Trudeau reversed the prevailing position on land claims with the controversial White Paper on Indian Policy that rejected aboriginal title claims. A recent study has shown that the government rejected those claims on the assumption that Canadian law did not recognize Indian aboriginal title. Paradoxically, the White Paper was tabled in the House of Commons less than two months after the Nishga people of northwestern British Columbia had begun a major court case in which they laid claim to their traditional lands on the basis of aboriginal title.

The positions were firmly drawn. On aboriginal rights, Prime Minister Trudeau said, "Our answer is no." A series of Indian actions challenged this new position of the federal government. The Nishga people lost their court case in the fall of 1969, but they promptly moved to appeal the decision. In December 1971, President Richard Nixon signed the Alaska Native Claims Settlement Act, under which Native corporations in Alaska would receive 40 million acres of land and almost \$1 billion of compensation. This was the first modern, comprehensive settlement of land claims for an entire region. Although the settlement has been frequently criticized, the amounts of land and capital involved are dramatic, and the settlement ended possible challenges to the development of oil discoveries at Prudhoe Bay. Resource development and the settlement of Native claims were concurrent issues in Alaska, as they have since proved to be in the Canadian north.

In July 1972, the Union of British Columbia Indian Chiefs presented their aboriginal title claim to the federal cabinet. At the same time, Cree Indians of Quebec were trying to negotiate with the government

of Quebec about proposed James Bay hydroelectric project. When negotiations broke down, the Cree and Inuit of northern Quebec took the James Bay Corporation to court, and lengthly pre-trial proceedings began in the fall of 1972. In January 1973, the Supreme Court of Canada gave its decision in the Nishga land claim case. Three judges upheld the aboriginal title of the Nishga people. Three others ruled that Nishga land rights had been taken away without compensation. The seventh judge ruled against the Nishga on a procedural technicality. The decision was a technical loss, but a political victory. Immediately after the decision, representatives of the Nishga and other British Columbia Indians met with Prime Minister Trudeau. He conceded that "perhaps" the Indians had more rights than his government had thought when it prepared the White Paper in 1969.

In the midst of the policy turbulence of early 1973, the Yukon Native Brotherhood presented *Together Today for Our Children Tomorrow* to the federal cabinet. It was not the first presentation of a claim to the federal government, but the timing of this claim was dramatic, and its practical, future-oriented approach was politically compelling. For the first time in Canada, the settlement of an aboriginal title claim was put in terms of the future economic development of an Indian people. Prime Minister Trudeau stated, "in principle, I don't think there is a great difference between us." He described the approach taken by the Yukon Indians as "positive and constructive" and "very welcome to the government." It was a major policy breakthrough, and there was immediate agreement to begin negotiations. The Prime Minister's response to the Yukon Native Brotherhood's presentation was repeated in a broader federal statement on claims to aboriginal title, which was released by Mr. Jean Chrétien, Minister of Indian Affairs and Northern Development, on August 8, 1973. The claim and the need for a settlement were recognized in 1974 in the legislation that established Kluane National Park in the Yukon.

The Yukon Native Brotherhood and the Yukon Association of Non-Status Indians formed the Council for Yukon Indians as a joint body to negotiate the Yukon Indian land claim. Mr. Chrétien selected a federal negotiating team, which included the Commissioner of Yukon. Negotiations began in the fall of 1973, but progress was slow. On March 3, 1975, the federal government attempted to make a unilateral public offer of settlement, but the Indian negotiators objected to the action, seeing it as an attempt to circumvent the negotiating process, and forced Mr. Judd Buchanan, the new Minister of Indian Affairs and Northern Development, to change the "offer" into a

federal government "working paper". With the embarrassing failure of this initiative, the federal government reassessed its approach. In October 1975, Mr. Digby Hunt, who had been Assistant Deputy Minister for Northern Development, was named as the federal negotiator. The claims negotiator was now a senior federal official, and he held a full-time appointment: this step marked the beginning of a second round of negotiations on the Yukon Indian land claim.

Negotiations recommenced in Whitehorse in November 1975, and continued into January 1976. The Yukon government's position paper on the Yukon Indian land claims, prepared in October 1974, was publicly released in November 1975. It was debated and approved by the Yukon legislative assembly in December 1975. The Yukon Executive Committee put forward a draft agreement-in-principle and a position paper *Meaningful Government for all Yukoners* (which proposed four Indian seats in the Yukon legislative assembly); these documents were presented to the Indian negotiating team in January 1976. In May 1976, Mr. George Manuel, President of the National Indian Brotherhood of Canada, publicly released the Yukon draft agreement-in-principle and a federal draft agreement-in-principle. Mr. Manuel actively opposed any settlement based on these drafts, an action that immobilized the Council for Yukon Indians, and in June negotiations were suspended. Mr. Elijah Smith resigned as the chairman of the council, and he was replaced by Mr. Daniel Johnson. In the same period, Mr. Hunt was replaced by Dr. John Naysmith as the chief government negotiator, and Dr. A. M. Pearson became Commissioner of Yukon. These changes meant a complete change of the principal negotiators.

The third cycle of negotiations began in January 1977. Because questions of secrecy had plagued the previous negotiations, a decision was made to use an open planning process, rather than confidential negotiations, and a Planning Council was established to undertake a "co-operative planning process." The Planning Council has released four position papers. The most recent paper, a *Settlement Model*, was released to the public on July 14, 1977. It lays the foundation for an agreement-in-principle.

The Content of the Claim

The claim put forward by the Indian people of the Yukon has always been oriented towards the future. In

1973, in *Together Today for Our Children Tomorrow*, the Yukon Native Brotherhood stated:

The purpose of this settlement is to enable the Indian people in the Yukon to live and work together on equal terms with the White man. The method proposed to bring about this situation is to produce an economic base from which the Indians can compete.

This means that the Indian people will own land and have financial resources to develop that land for the benefit of the people living on that land.

The corner stone of the Settlement is land. But money is necessary for us to develop an economic base from that land. It will be of only temporary help, though hopefully it will be enough to produce the economic base from which the Indian people may develop in harmony with the White society in the years ahead (p. 51).

The Planning Council, in January 1977, stated that the goals of a settlement were to:

1. Restore, protect, preserve and guarantee the identity of Yukon Indians and their freedom to choose a way of life in harmony with their cultural heritage.
2. Provide land and other forms of compensation to the Yukon Indian people to compensate them for loss of lands traditionally used and given up under the settlement so that they may have the opportunity to build an economic base equal with that of other Yukon citizens.
3. Provide the Yukon Indian people with the incentive and opportunity to have their rightful say, within the context of a one-government structure, in the decision making authority which governs their everyday life.

Eligibility

All parties have agreed that status and non-status Indians will participate in the settlement. The Planning Council, the present negotiating body, declared a consensus on eligibility on March 8, 1977. The charter group population will be persons of 25 per cent Yukon Indian descent who were resident in Yukon between January 1, 1898 and January 1, 1941. Such persons and their descendants are entitled to be enrolled. There is no minimum degree of racial descent specified for persons to be enrolled as descendants of the charter group. Adopted children are treated as descendants. A person is also eligible to be enrolled if he or she "... is regarded as eligible by the Credentials Committee of the community in which he or she is resident, subject to criteria to be specified in a Final Agreement."

The Council for Yukon Indians has estimated that the total population entitled to be enrolled is about 6,000. Early in 1974 the Council began enrollment, and more than 4,000 persons have been enrolled to date.

Land

In 1973 the Yukon Native Brotherhood proposed that lands be granted to "Indian Municipalities" and that additional lands should be set aside for historic sites, camps, cemeteries, for hunting and trapping cabins, and for local economic development projects. Such land would include subsurface rights, water rights, timber rights, and exclusive hunting, fishing, and trapping rights. No figures were given for the quantity of land that would be involved.

The Yukon government's position paper of October 1974 suggested the allocation of 1,200 square miles of land or 128 acres of land per capita, whichever was larger. The per capita figure was derived from the prairie Indian treaties. These lands would include subsurface rights and would be subject to taxation. The paper noted that 1,200 square miles was less than one per cent of the area of the Yukon, whereas Alaska Natives had received eleven per cent of that state. The difference, the paper suggested, reflected the importance of the Alaskan oil and gas discoveries.

Later documents have all involved categories of land, reflecting the pattern established by the settlement of the Cree and Inuit claims in northern Quebec. The federal government working paper of March 1975 proposed a settlement with three categories of land, but with no subsurface rights. Indians would have full surface rights to 128 acres per person, ownership of an unspecified number of lots in existing communities, and exclusive hunting, fishing and trapping rights over 15,000 square miles. The federal draft agreement-in-principle of 1976 expanded this offer by including subsurface rights, adding 2,000 square miles of timber rights and allocating \$2 million to purchase lots within existing communities. Leaseholds would be granted for hunting and trapping cabins, and to protect graves, religious sites, and historic places.

The 1976 federal draft agreement-in-principle involved at least 18,400 square miles, or just over 11 per cent of the total area of the Yukon. Most of this land would not be fully owned by Indians, and existing private rights would limit the lands that are available for selection.

The Planning Council's *Settlement Model* of July 1977 refers to land for residential use, traditional pursuits, historic sites, and economic development. The Planning Council would be empowered to recommend the freezing of specific lands to ensure that they would be available for selection and inclusion in a final settlement.

The Alaskan settlement provides clear warnings in relation to land selection. In Alaska, land selection occurred after the settlement legislation, and there was 111

a strong feeling of betrayal when government agencies withdrew large areas of land for special purposes, making them unavailable to the Native corporations. The process has been so troubled that today, six years after the settlement legislation, very little land has actually been transferred to the Native corporations. The lesson seems clear that land selection must precede final settlement legislation, as with the James Bay and Northern Quebec Agreement.

This Inquiry has heard statements that there is an informal land-freeze in the Yukon at the present time. There is a shortage of lots within some organized districts or communities, but this problem appears to be related to the lack of serviced lots, rather than to any deliberate land-freeze policy. Any applications for federal Crown lands are processed by the Federal-Territorial Lands Advisory Committee, which operates under the following constraints:

1. No grants of agricultural or grazing lands will be made, pending the completion of certain studies and the formulation of a territorial government agricultural policy. Grants for market gardens are possible.
2. Cottage lots will be made available only in planned subdivisions. One subdivision with over 50 lots came onto the market earlier this year. Certain proposed cottage subdivisions have been stopped because the land claims negotiators have expressed interest in the area.
3. Few residential lands outside existing communities are granted because of the Government of Yukon's desire to minimize the costs of services by maximizing settlement within existing communities.
4. Applications for land for commercial operations outside of existing communities are thoroughly reviewed on the grounds of economic viability and of their compatibility with adjacent land use. Few such applications are received.
5. Decisions for industrial projects, such as mines, are normally made at another level.

The present constraints on land grants in the Yukon serve to reassure the parties involved in the Planning Council that prejudice to land selection is being avoided. An informal procedure for protecting specific lands already exists.

Hunting, Fishing, and Trapping

In 1973 the Yukon Native Brotherhood sought the right to hunt and fish for food on all Yukon lands, the right to

trap on all unoccupied land, and asked for exclusive hunting and fishing rights and the exclusive right to regulate trapping on their own lands.

The Yukon government's position paper of October 1974 supported this request for exclusive Indian hunting, fishing, and trapping rights on Indian land, but it rejected other aspects of the Brotherhood's proposal. The federal government documents of 1975 and 1976 would have recognized a special Indian right to hunt and fish for food on unoccupied Crown lands.

The Planning Council's *Settlement Model* of July 1977 referred to traditional and commercial wildlife harvesting. For the former, the Indians would have "certain rights." For the latter, "special consideration" would be given to Indians, "consistent with good management practices and laws of general application."

Capital and Income

In 1973 the Yukon Native Brotherhood asked for (a) a capital payment to be used for socio-economic development, (b) a percentage of the gross value of all gas, oil, and mineral production in the Yukon, (c) a royalty payment based on all revenue received by the federal and territorial governments from wood and forest products, and (d) 15 per cent of all revenue collected by the federal and territorial governments from commercial hunting. No exact figures were given.

The Yukon government's position paper of October 1974 rejected the idea of Indian revenues from royalties or resource production, but it suggested capital payments of between \$25 million and \$30 million, with an unspecified additional sum to establish a Yukon Native Development Corporation.

The first version of the federal working paper of 1975 – it was, in fact, an offer of settlement – suggested an initial payment of \$25 million and a further \$25 million from gross federal revenues from Yukon resource development. In addition, Indians would receive 50 per cent of gross government resource revenues from the 1,200 square miles of land that they would receive as part of the settlement. In this offer, they would not have received subsurface rights.

In a public speech in 1975, a lawyer, representing the Council for Yukon Indians, suggested that compensation might total \$150 million.

The federal draft agreement-in-principle of 1976 involved a capital payment of \$35 million. On the 15,000 square miles, Indians would receive 25 per cent of government revenues from non-renewable resources up to a maximum of \$8 million. On

unoccupied Crown lands, the Indians would receive 25 per cent of the gross government resource revenues up to a maximum of \$55 million, and there would be a minimum guarantee of \$25 million from this source. The total compensation, over time, would be between \$60 million and \$98 million.

The Planning Council's *Settlement model* of July 1977 simply stated that compensation "may include cash as well as a share of royalties accruing from resource development."

Any settlement of the land claim will involve a balance between land, special rights, programs, capital, and income. For example, the Inuit of northern Quebec have a settlement that is different from that of the Cree. The Quebec Inuit asked for more land and less money. Comparisons cannot properly be made between single elements of different settlements without understanding the different settlements as a whole. Nevertheless, it may be noted that the James Bay Crees, with a population of approximately 6,500, will receive \$135 million in compensation under their agreement.

It has been suggested that the Yukon Indians could become part owners of the pipeline through a land claims settlement. Mr. Elijah Smith, testifying on behalf of the Council for Yukon Indians before the Berger Inquiry, suggested majority Indian ownership. Commissioner Pearson suggested some Indian ownership in his testimony to this Inquiry. Mr. Robert Blair, President of Foothills, suggested that Yukon Indians might be able to have 25 per cent ownership and seats on the board of directors. The present position of the Council for Yukon Indians appears to be against such involvement with the pipeline (49-7107).

Economic Development

In 1973 the Yukon Native Brotherhood stated, "We are strong supporters of development." *Together Today for Our Children Tomorrow* envisages Indian involvement in the full range of economic activities in the Yukon, although it saw employment in the renewable-resource sector and in support industries as more in harmony with Indian attitudes than in extractive industries, such as mining. The document made a number of specific suggestions. Describing trapping as the most important industry for Yukon Indian people today, it suggested a cooperative method for selling furs and the possibility of support for fur prices. It also tentatively suggested fish farming, small-scale sheep and cattle ranching, reindeer herding, a dude ranch, and saw mill operations. It proposed the partial mechanization of handicraft work and suggested an Indian-run store for each village and

Indian-run construction companies that could share in the projects tendered by the Yukon government, the Department of Indian Affairs and Northern Development, and other governmental and private agencies. The mechanism necessary for economic development was a Yukon Native Development Corporation, which had a non-profit research and training component.

Since Indian control of resources and institutions is a fundamental part of a land claim settlement, it would be inappropriate for the settlement to dictate specific directions for future Indian economic activity. In 1973 the Yukon Native Brotherhood stated its economic development goals. Later documents, coming from the Yukon government, the federal government, and the Planning Council, simply discuss the resources that would be transferred and the formal institutions that would be created. The Yukon government's position paper of October 1974 supported the idea of a Yukon Native Development Corporation. The federal documents of 1975 and 1976 speak only of structures and resources. The economic development goals are implicit rather than explicit. We have already said that the Planning Council's *Statement of Goals* of March 1977 declared that a settlement should include land and other forms of compensation to enable the Indian people to build an economic base that would be comparable with that of other Yukon citizens.

In 1977, Mr. Daniel Johnson, Chairman of the Council for Yukon Indians, in testifying before the National Energy Board, said:

I can further assure you that the preservation of the Yukon Indian lifestyles and cultures is our primary interest, and that the preservation of these lifestyles and cultures can be achieved by first granting us the kind of autonomy that we once exercised over our lands. Economic development will flow from the settlement as a natural part of it, but it is not our paramount concern.

This may or may not be a shift in emphasis on the part of the Yukon Indian people. Recent studies of Indian economic development elsewhere have emphasized that success seems to be achieved only if economic development projects are related to the culture and traditions of the particular Indian group.

Political Structures

The political implications of a settlement of the Yukon Indian land claim have been discussed in relation to four questions: territorial government, local government, administration of land use and renewable resources, and the provision of services to Indian people.

'Tagish Charlie', the man who first found Klondike gold
(Yukon Archives)

Indian packers on the summit of the Chilkoot Pass on April 6, 1898
(Yukon Archives)

Man beside his sweathouse constructed of skins and poles
(Yukon Archives)

Indian grave at Moosehide Creek (Yukon Archives)



In 1973, the Yukon Native Brotherhood proposed, as part of a settlement, the establishment of a central Indian organization and of twelve Indian municipal governments at the local level. The Yukon government's paper in 1974 suggested that these institutions should all be companies or societies, rather than governmental institutions, because it preferred a settlement that involved only private property institutions. In that, the government's thinking was along the lines of the Alaska settlement.

In December 1975, the Executive Committee of the Government of Yukon put forward a position paper, *Meaningful Government for All Yukoners*, in which it recognized as a problem the very limited Indian participation in the Yukon government. For example, no Indian has ever held a seat on the legislative assembly. The paper considered various proposals, but in the end it supported the idea of four Indian constituencies, in which only Indians could vote or run for office, superimposed on the existing twelve constituencies. The paper was vitally concerned that a one-government structure be retained at the territorial level. In March 1977, the Planning Council issued its *Statement of Goals*, which said in part that a settlement must:

Provide the Yukon Indian people with the incentive and opportunity to have their rightful say, within the context of a one-government structure, in the decision making authority which governs their everyday life.

And the Planning Council saw a need to:

Develop a one-government structure which reflects and is responsive to interests of all Yukon residents and which is compatible with the evolution of government in the Yukon.

The Planning Council's *Settlement Model* of July 1977 spoke of providing "incentives and guaranteed opportunities" for Indian participation in the "political and administrative institutions of a one-government structure, and in the decision-making process."

In April 1977, the legislative assembly voted to increase the number of members from 12 to 16. Some members of the legislative assembly debating the resolution, spoke of the desirability of Indian representation in the assembly, and saw the increased number of seats as a likely means of achieving that goal.

The *Settlement Model* clearly stated that Indian-controlled corporate structures will be established to "receive, administer and manage the proceeds of the settlement." The corporations would have control over "lands, monies and certain programs, for example cultural-education centres."

Local corporations would be property-owning institutions. Although they would be responsible for certain programs, it is not suggested that they would be municipal or regional governments. The Council for Yukon Indians is clearly interested in a significant degree of local self-determination. It has stated:

The lands which are retained by the Yukon Indian people will be controlled by a municipal structure at the community level. The concept of the Council for Yukon Indians is that the local community will have the right to carry out all functions including the running of schools, welfare, policing and local judicial systems on the Indian lands, child adoption of their people, road building, zoning and general regulation by local bylaws.

The Planning Council's *Settlement Model* did not address the question of local government structures, a subject that is being examined now by a working group. The draft agreement-in-principle, expected by the end of 1977, may have some provisions on local government. It seems clear that special Indian local government structures are not incompatible with the one-government principle at the territorial level.

In 1973 the Yukon Native Brotherhood suggested that management of fish, fur, and game in the Yukon be under the control of a joint authority, representing the Indians and the federal and territorial governments. The Commissioner of Yukon in 1975 suggested joint game committees and stated that joint economic development and resource management commissions were possible. The Planning Council's *Settlement Model* of July 1977 stated that Indians would be guaranteed participation "... in the administration and management of the natural resources of the Yukon," and it specifically proposed an Advisory Planning Council on Yukon development that would be composed of Indian and government representatives.

The Government of Yukon has wanted to avoid multiplication of delivery systems for programs. It has indicated a willingness to handle certain Indian Affairs programs on contract, to maximize the provision of services under the auspices of the Yukon government. The Planning Council's *Settlement Model* provides for special social, cultural, and educational programs for Indians that "shall be provided by government" to "reinforce Indian cultural identity and ensure that the imbalance of opportunity and participation which currently exists between Indians and non-Indians of the Yukon is overcome." There will be special programs for Indians as part of the settlement. The Department of Indian Affairs and Northern Development may maintain a presence in the Yukon, as it has in northern Quebec. The exact scheme for the delivery of services to Indians in the Yukon under a settlement is not yet clear.

Termination or Special Rights?

Critics of the Alaskan settlement focus on the fact that it involves the termination of special rights. After 20 years, the United States Bureau of Indian Affairs will cease to function in Alaska. After 20 years, the shares in the Native corporations may be sold to non-Natives. It was a fundamental part of the settlement that no permanent reserves or racially defined institutions were created. Critics fear that Alaskan Natives may lose control of their land and their corporations in the future, before they attain social and economic equality with other Alaskans.

In contrast, the James Bay and Northern Quebec Agreement creates permanent, legislatively defined groups of beneficiaries, which have special rights, particularly in relation to hunting, fishing, and trapping. The Department of Indian Affairs and Northern Development will continue to serve the region, and special institutions for Inuit and Indian local government are being created.

Together Today for Our Children Tomorrow proposed to terminate the Indian Affairs programs of the Department of Indian Affairs and Northern Development in the Yukon, and it treated certain exemptions from health insurance premiums and income taxation as transitional only. But the proposal, as a whole, was clearly not terminationist. Permanent Indian local governments would be created, and the Indian land base would be protected from sale.

The Government of Yukon has been concerned with avoiding special status for Indians. While it accepts the basic idea of an Indian land claim, it advocates a settlement that involves corporations and societies, but no special governmental agencies. Two examples are perhaps useful. At present, the Yukon Act provides that territorial game laws shall not restrict Indians from hunting for food on unoccupied Crown lands. The Yukon government proposes to alter this provision to protect subsistence hunting by both Indians and non-Indians. The Yukon government can accept exclusive Indian hunting, fishing, and trapping rights on Indian lands as a property right, but it opposes specially legislated rights for Indians in other parts of the Yukon. Equally, the Yukon government is opposed to special royalty payments or to tax exemptions for Indian people. It would prefer Indians to be owners of land and capital within the same legal framework that applies to non-Indians.

The federal government has not promoted termination in either northern Quebec or the Yukon. After the rejection of the White Paper on Indian Policy, Ottawa has accepted the continuation, even the strengthening,

of special legal status for Indian people and Indian lands.

The question of special status is basic to the present negotiations, and it is important to the evolution of responsible government in the Yukon. In each jurisdiction that has become a province since 1867, some special arrangements have been made in relation to Indians or Indian lands. On the prairies, there are constitutional protections for certain Indian hunting and fishing rights. Even in Newfoundland and Labrador, there is a special federal-provincial financial agreement. A settlement of the Yukon Indian land claim that followed closely the Alaskan model could be expected to lead to no federal jurisdiction over Indians in the Yukon, after the achievement of provincial status. A settlement like the one in northern Quebec would mean federal jurisdiction over Indian rights after provincial status was achieved. It is important for all Yukoners that the character of the settlement be resolved so that increased self-government need not be delayed in the Yukon. The Council for Yukon Indians has taken a position opposing provincial status for the Yukon until their land claim is settled.

The Views of the Indian Communities

The Inquiry travelled to each of the twelve Indian communities in the Yukon to hold informal community hearings. The Board was gratified by the extent of participation and impressed by many indications of strongly held community values and by the people's pervasive concern for the land.

The Council for Yukon Indians stated its position to the Inquiry before our community hearings took place. Mr. Grafton Njootli, Vice-Chairman of the Council for Yukon Indians, stressed its position that settlement and implementation of the land claim must precede any large-scale development such as a pipeline. An information kit, published by the Council for Yukon Indians in January 1977, gave the following reason for the stand:

Pipelines, or any other major development will tie up even more land, cause many rapid changes in our people and culture, and we will have little control over any of it. After land claims are settled, we will know better where we stand, and we will be better able to control some of the changes.

It is important to note that the Council has not taken a stand against pipelines in general, nor has it expressed

any general opposition to the development of the Yukon economy. It is concerned, as we see it, with priorities and participation, as well as with the preservation of certain traditional ways of life. We found in the hearings in the Indian communities widespread support for the position taken by the council.

The testimony of Indian witnesses was almost overwhelmingly apprehensive about the pipeline proposal. A few persons supported the project, anticipating greater job opportunities, but most were negative towards it for a number of reasons. Many Indian witnesses were worried about the safety of the pipeline. They feared ruptures in the pipe and possible damage to the land, animals and fish. Witnesses also stressed their apprehensions about an influx of construction workers, fearing an increase in alcoholism, temporary sexual liaisons, illegitimacy, and family breakdowns. They felt their communities would suffer in other ways by the construction boom, such as by higher prices and by the diversion of services to the pipeline operation. Many saw this boom as inevitably similar to the booms of the past. It would encourage the expansion of non-Indian activity and control in the Yukon to the relative or absolute disadvantage of the Indian people. In the past, economic gains to non-Indians have often been seen as having been achieved at the expense of the Indians. As part of this view, many witnesses, including a non-Indian Roman Catholic priest, remembered the Indian way of life that existed before construction of the Alaska Highway as superior to the life the Indians have now.

It seems appropriate to quote the words of Indian witnesses from a few of the community hearings. Mr. Tom Graham of Upper Liard stated:

I think land claims should be settled first, then schools can be built to educate the people so they can take part in the building of this pipeline. They'll know more about it. There's a lot of people that wanted to come down to this meeting tonight, but our main problem has taken over again – alcohol. I think these problems have to be settled first before we start moving on to bigger things like the pipeline (18-2370).

Chief Sam Johnston of the Teslin Band testified on behalf of his people:

My people haven't recovered from the impact of building of the Alaska Highway. They have lost their self-respect, identity, their lifestyles have changed and with it came problems We are a small community with approximately three hundred and fifty people. We have the usual problems – unemployment, alcohol, poor

standards of living. Will our men and women get steady employment? What guarantees have we that the Yukoners will get job priority? (19-2417).

Ms. Georgina Sidney spoke of the Teslin Band's attempts to regain its community cohesion:

We've been trying to settle land claims for a good many years and a lot of people have tried and the people here are not ready for the pipeline. If land claims isn't settled before the pipeline goes through, we'll have lost everything we fought for. We're at the point now where we're all getting organized together, all the Indian people are getting organized and they're coming together like the way we were a long time ago before the highway came through I imagine and if the pipeline comes through, it's going to pull everything out from under us (19-2426-7).

Mrs. Mary Easterson is Educational Consultant for the Yukon Native Brotherhood. She testified, as a member of the Kluane Band, at Burwash Landing:

The Indian people, after the construction of the pipeline, will be the only ones left to piece their culture together. We have become a minority in our own country. In order for us to develop and govern ourselves in the manner in which we choose, we must be given the time to do so. Native organizations and Band councils are in the early stages of developing leadership and the skills needed to cope with the present situation.

We have been subject to years of indifference and colonialism by the white system. We are not prepared to live under these conditions any more. Nor, are we going to be shoved into another situation where we will be forced to accept your decision. If a decision is made to construct the pipeline, and the land claims settlement is not settled, you will be denying us one of our basic rights as human beings. You will also be denying us the opportunity to plan and determine our future as we see fit. The pipeline issue has, and will create, a rift between the two cultures in the Yukon.

I caution you as representatives of your government to be very careful in your deliberations and decisions. This land is not yours to take, it still belongs to the Indians. (22-2778).

Ms. Jesse Johnson, an elder of the Kluane Band, like many of the older witnesses, testified in her native language:

[Translation] She said they just, the white people they just found this land now. She said to worry about it and argue about it, and she said land be here many years and nobody look at it. Now they just want to fight about everything. Many times they say "no", how many more times they going to have to say "no", to pipeline (22-2792).

The testimony of Mrs. Mabel Henry, the wife of the Chief of the Dawson Band, reflected a common Indian distrust of White promises:

What is going to happen when the pipelines come through and the workers have our roads to travel on? When our children are easily reached, what sort of men will come up? How can you as government, promise our people we will not be affected? You promised before and these promises have been broken. The people are living on welfare and the white people thought it was a good thing, but why didn't they ask instead of thinking for us? (26-3081).

We were made aware in the Indian communities of a deep concern for social and economic problems. We were impressed by the frankness with which many Indian witnesses spoke of the problems of alcohol, welfare, and unemployment. Their frankness showed, we felt, a desire to tackle the problems that they recognized in their own communities. Some hoped for employment from the pipeline, but they realized that they would generally be able to get only unskilled jobs and that the construction period would be short. Over and over again, the Indian witnesses referred to a settlement of the land claims as the primary vehicle for building their economy, for strengthening their culture, and for restoring pride and self confidence.

The Question of Prejudice

It has been suggested to the Inquiry that the construction of a pipeline before the settlement and implementation of a land claim will prejudice a just settlement of that claim for the following reasons:

1. The economic activity that will accompany pipeline construction would result in additional non-Indian land grants and land use before the Indian people have been able to select land as part of the settlement of their claim.
2. The Indian people are now a minority in the Yukon, and they have not been able to participate effectively in its political life. An increase in the non-Indian population could further weaken the political position of Yukon Indian people at a time when a settlement of their land claim is promising them local self-determination and effective political participation at the territorial level.
3. The Yukon Indian people have proposed a development-oriented settlement. Such a settlement

would have the best chance of success if it preceded an economic boom, such as the boom that a pipeline project would create.

4. A pipeline before a land claim settlement will be seen, at least by many Indians, as a White victory and an Indian defeat. Conversely, a moratorium would be seen by many Whites as a White defeat. The situation has great potential for increasing racial tension in the Yukon.

5. The adverse impacts of pipeline construction would be disproportionately felt by the Indian communities. Settlement and implementation of the land claim before construction would better prepare Indian communities to deal with all kinds of change. Ideally, the communities should not be forced to deal with the implementation of a settlement and the impact of the pipeline at the same time.

6. The attitude that major land use projects can go ahead prior to a settlement of land claims suggests that land claims can take second place to other concerns. It is only if land claims are given priority over other land use and development projects that there will be sufficient political pressure to ensure a just settlement.

It is necessary to speak separately of the community of Old Crow. The economic base of the Indians of Old Crow involves both Crow Flats and the Porcupine caribou herd. The people of Old Crow want a settlement that protects both. They want no future oil and gas exploration on Crow Flats and they ask that existing exploration rights in the area be ended. They fear that a pipeline through the northern Yukon, apart from other consequences, would stimulate oil and gas exploration in the area and endanger the wildlife of the region. They expressed fear that the construction of the Dempster lateral, if permitted, would adversely affect the Porcupine caribou herd, because the pipeline would pass through the herd's wintering grounds. They fear that their land claim would not simply be prejudiced, but that it would be effectively denied by a pipeline along the Dempster Highway.

The federal and territorial governments and the Council for Yukon Indians agree that a settlement of the land claim should contribute positively to the social and economic future of Indian people in Yukon. An ideal settlement of their land claim has already been prejudiced by the extent of non-Indian settlement and development in the Yukon, including the Alaska Highway. It appears to the Board that, to avoid significant further prejudice to the settlement of this claim, it is necessary not only that a settlement

precede the construction of the pipeline but that a settlement be effected soon.

If a pipeline through the Yukon is approved according to the Foothills application, construction could begin in June 1979. Both the Council for Yukon Indians and the federal negotiator testified as to the time necessary to settle and implement the land claim. Mr. Johnson, Chairman of the Council for Yukon Indians, envisaged seven to ten years as the period with which his people would feel comfortable for the settlement and implementation of their land claim. When asked if this estimate was capable of major change, he replied:

Mr. Chairman, our outline for the continued planning, negotiating, settlement and implementation of the land claim is one wherein we, as Indian people, have had to carefully consider the greatest amount of comfortable lead time that would be necessary for us to do those things that are necessary to complete the settlement.

So to directly answer the question, I'm sure if we had sufficient time and it's very difficult once again to say sufficient time because we aim at optimum time and comfortable time. So I would have to say in direct answer to your question that I'm sure it's capable of less than seven to ten years, but we still maintain that we're comfortable with seven to ten years (49-7103).

Mr. Johnson envisaged a three stage process: (1) a draft agreement-in-principle and its ratification, (2) the final agreement and its ratification, and (3) the final legislation and its ratification. The ratification could not be rushed he said, because the Indian communities make decisions on the basis of consensus. He emphasized that land was the cornerstone of a settlement and because a settlement could be implemented sequentially, it was logical to consider land as the first aspect of it. Both the testimony of Mr. Johnson and of Dr. Naysmith, the federal negotiator, made it clear that there were three elements to the land aspect of a settlement: (1) the land selection process, (2) the question of tenure or the legal form of landholding, and (3) the question of the corporate structures that would hold and manage the land.

There is at present an active subcommittee of the Planning Council dealing with the land selection process. The Planning Council's *Settlement Model* of July 1977 describes the council's role in land selection after an agreement-in-principle had been achieved. The council would identify "specific community lands which may require protection in advance of a final settlement" and recommend to the Minister of Indian Affairs and Northern Development that such lands be protected, pending a final settlement. In addition, Dr. Naysmith foresaw a land commission for the Yukon

that would be charged with a general responsibility for land use planning. The commission would represent the three parties on the Planning Council, and it could be the vehicle for land selection. Both Mr. Johnson and Dr. Naysmith envisaged the selection of land beginning after the agreement-in-principle, which is expected to be signed in 1978. Neither witness suggested the length of time that might be necessary to complete the process of land selection, although *Together Today for Our Children Tomorrow* suggested that a period of from six to twelve months would be adequate. Since that document was written in 1973, preliminary work toward land selection will have advanced somewhat; on the other hand, the impression gained from testimony before the Inquiry was that the six to twelve month estimate was an optimistic one, having regard to the nature of the issues. Final decisions as to tenure, corporate structures, and quantity of land have yet to be made.

Both Mr. Johnson and Dr. Naysmith remarked upon the "sequential" or "evolutionary" character of the settlement process that is currently underway. This character made it inherently impossible to fix precise times for the particular stages of the settlement or its implementation. Dr. Naysmith tended to be more optimistic and Mr. Johnson to be more cautious in anticipating the amount of time that might be required. Thus Dr. Naysmith looked forward to a final agreement by the end of 1978. Mr. Johnson saw the drafting of the final agreement alone as taking perhaps two years, to be followed by ratification. The preparation of the settlement legislation is yet another question. If the model of the James Bay and Northern Quebec Agreement is followed, the legislation will simply implement the final agreement, thereby avoiding the problems of additional drafting.

The elements of consensus include (1) the achievement of a draft agreement-in-principle by the end of 1977, (2) the achievement of an agreement-in-principle sometime in 1978, (3) a process of land withdrawal or land selection beginning thereafter, and (4) sequential settlement and implementation of the agreement-in-principle, beginning with land selection.

There also appears to be agreement that the questions of political structures and political involvement are the most complex and challenging and, at least in part, they may take the longest time for full implementation. This latter point is particularly important. Mr. Johnson identified land and political structures as the two most vital elements of the settlement that must be implemented before any major development project, such as the pipeline, can be undertaken. An argument for a substantial delay would focus on the question of

political structures, not on the elements of land and financial compensation.

Recommendations

The Board is concerned that its recommendations should facilitate, as far as possible, the Planning Council's negotiations that are now underway. We do not wish to intrude ourselves into this process, for we have been assured by the parties to it that negotiations are going well. We are unanimously of the opinion that a just and timely settlement of the Indian land claim (1) will aid in the economic, social, and cultural development of Yukon Indians and, indeed, of all Yukoners, (2) will facilitate the evolution toward self-government in the territory, and (3) will serve the goals of reducing racial tension in the Yukon and of avoiding further polarization of Yukon society. These goals are too important to be cast aside for a project the primary benefits of which will accrue to areas outside of the Yukon and, indeed, outside of Canada.

We are of the opinion that the adverse effects of the pipeline on the Yukon Indian land claim can be adequately mitigated if the following steps are taken.

1. To facilitate land selection, the present constraints on land grants in the Yukon must be continued until August 1, 1980, unless land selection is completed by an earlier date. In addition, the informal method of protecting specific parcels of land in anticipation of the land claim settlement must also be continued. Land selection could begin as soon as may be agreeable to the members of the Planning Council. Either the Planning Council or the Land Commission envisaged by Dr. Naysmith could approve these selections. Requests for the transfer of lands that have been selected by Indian-controlled institutions or requests to permit the specific use or development of particular lands could go to the Planning Council. In this way, maximum flexibility would be achieved. The constraints and the selection process would not affect lands at present held in private ownership or leasehold, nor would they apply to lands selected for the right-of-way of the pipeline. Because of uncertainties relating to the exact route of any pipeline, there would have to be provision to withdraw lands that had been selected on the right-of-way that is finally chosen and to replace them with alternative lands.

This recommendation seeks to minimize prejudice to land selection, while avoiding an unnecessarily rigid land-freeze in the Yukon. It is the feeling of the Board

that a reasonable accommodation in this regard is possible.

2. It is important to avoid prejudice by delay and to ensure that the Indian people of the Yukon have adequate financial resources to proceed with the selective implementation of a settlement, concurrently with the continuing negotiations of the Planning Council. To achieve these goals, we recommend that the sum of \$50 million be deposited in a special trust fund bearing interest at a rate equal to the Bank Rate (Bank of Canada lending rate) calculated daily. This fund should be established immediately. It should bear interest from August 1, 1977, and it will constitute an advance payment to the Indian people of the Yukon. The interest from this fund should be made available to the Indian people immediately. Specific decisions as to the recipient organizations or institutions, the timing of payments, and even the transfers of portions of the capital sum would be the responsibility of the Planning Council. We must emphasize that we do not intend to prejudge the settlement or to emphasize unduly the financial component of a settlement over other elements, such as, for example, the question of political structures. Nor do we wish to suggest, directly or by any implication, what capital sum might be involved in a final settlement. The process of negotiations from 1973 to the present leads us to conclude, from what the parties to the negotiations have said from time to time, that there will be a substantial capital sum involved in a final settlement. The sum we have recommended appears to fall within the range of figures that have been mentioned, but we recognize that there are complicated interrelationships among the different elements of a settlement and that the capital component may be increased or decreased in relation to other elements, such as royalties or the quantity of land. The James Bay Agreement saw changes in the capital sums discussed for both of these reasons. To ensure that the sum we have named will be clearly seen as not prejudicing a settlement, it should be provided that, if the final capital sum or the initial capital payment is less than the figure we have stated, the difference should be repaid to the Government of Canada. In the case of such repayment, no interest payments should be refunded. This latter provision simply ensures that the Indian people of the Yukon are not prejudiced in any way by accepting these interest payments.

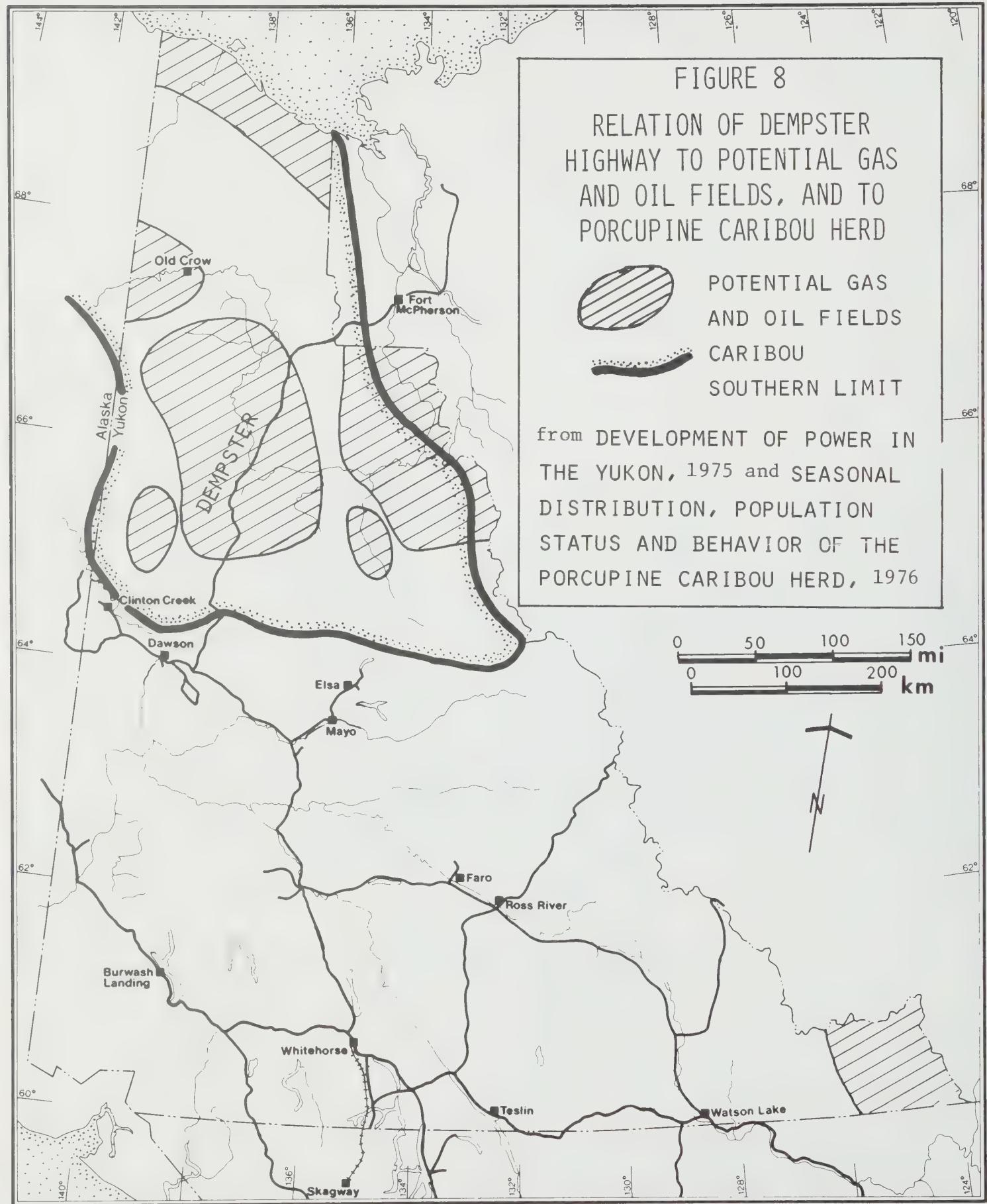
We are not suggesting that money is the major issue in the settlement of the land claim. Alone it is clearly not the answer to the questions that must be resolved. There are complex issues relating to land and political structures that will require careful thought and thorough discussion. However, we feel strongly that the lack of funds should not be a problem for the Indians in

this process. We believe also that there should be a very concrete demonstration by the Government of Canada of its commitment to a just settlement of the Yukon Indian claim.

3. For the reasons stated in Part E of this Chapter, some additional time is desirable to avoid prejudice to a just settlement. Construction of the pipeline should not commence before August 1, 1981.

9 Dempster Lateral





Any complex question considered by a public inquiry may be expected to bring forth conflicting viewpoints. But, in this Inquiry, the views expressed on one subject – a pipeline along the Dempster Highway – disclosed a remarkable degree of consensus. Almost everyone agreed that construction of a pipeline along this route would not be desirable, either now or in the foreseeable future.

Dempster Lateral or Maple Leaf Line

The 'Dempster lateral' is the name commonly given to a pipeline that could, some day, connect gas supplies from the Mackenzie Delta-Beaufort Sea area to a main pipeline that could run through central or southern Yukon. It is named after the Dempster Highway because it is assumed that such a pipeline would more or less parallel this still uncompleted highway, which runs north from Dawson. When it is completed, it will pass Fort McPherson and Arctic Red River to reach Inuvik in the Mackenzie Delta (see Figure 3).

The Dempster lateral is not an alternative to any pipeline that is at present being proposed to transport Alaskan gas across the Yukon to American markets. It would carry Canadian gas south to Canadian markets by connecting to the main pipeline at Dawson or Whitehorse, after which point the main pipeline would carry both Alaskan and Canadian gas to their respective markets in the south. A pipeline along the Dempster Highway is only one of the possible means of moving Canadian gas south to Canadian markets. The alternative is an entirely Canadian pipeline that would transport Canadian gas to Canadian markets by way of the Mackenzie Valley. This route is known as the Maple Leaf line. These alternatives are shown in Figure 2 under headings A and B: Alcan-Foothills project with Dempster lateral, and Alcan-Foothills project with Maple Leaf line.

In March 1975, the National Energy Board received an application from Foothills to build the Maple Leaf line. Foothills withdrew this application shortly before July 4, 1977, when the National Energy Board recommended to the Government of Canada that an application to build a Dempster lateral should be filed on or before July 1, 1979, as a condition to the construction of a main pipeline across the southern Yukon.

The Dempster Highway

Highways and pipelines have been inseparable themes in this Inquiry, and many people who appeared before us volunteered their opinions about a pipeline along the Dempster Highway. Many of these submissions dealt extensively with the highway itself and, to understand what Yukoners think about a Dempster lateral, it is important to understand what they think about the Dempster Highway. In the Yukon, the very existence of a highway seems to suggest that there is a potential pipeline route along it – but there is serious doubt that the Dempster Highway is compatible with a pipeline.

Not all highways are alike, and the Dempster Highway is not an ordinary highway. It was conceived in the late 1950s, under the federal government's Roads to Resources policy, "to encourage the economic development of the Yukon and Northwest Territories by constructing a network of permanent roads connecting existing communities and leading to specific resource developments and areas of promising resource potential" (Exhibit 129, *Paper on Dempster Highway and Proposal for Management of Highway Corridor*, p. 2).

Here, the main area of "promising resource potential" is the Eagle Plain, which is the largest sedimentary basin in the Yukon. The Dempster Highway now runs directly across it (see Figure 8). Exploration of the area has not yet revealed any encouraging signs of gas or oil, but the results so far are inconclusive because most of the recent exploration has been diverted to the Mackenzie Delta and Beaufort Sea region. Although we cannot ignore the possibility that important reserves exist in the northern Yukon, the Dempster Highway has increasingly come to be seen simply as an overland link between the southern Yukon and the Mackenzie Delta region. The Dempster Highway runs north from the Klondike Highway, starting 25 miles east of Dawson. There is a commercial lodge and a gas station located there, but there are no settlements between Dawson and Fort McPherson, a distance of 344 miles, and there is no gasoline available along it, except some at a maintenance camp located at Mile 123.

The first part of the highway already needs upgrading, but the remainder is built to all-weather standards and will carry load limits similar to those carried on the Alaska Highway. Its first 45 miles were built in 1960, and the final work on it will apparently not be done until 1979, although the entire highway is expected to be open to traffic by the end of December 1978. The sections of the highway constructed so far are barely used. Current traffic counts are not available, but an

estimated 2,000 tourist vehicles per year use it. These figures will no doubt increase dramatically with completion of the highway.

Although few people now inhabit the area the highway passes through, there is serious concern for the effect that traffic along it may have on the Porcupine caribou herd and concern also for the substantial social and economic effects it will have, not only on the settlements at both ends of the highway – Dawson in the south and the Mackenzie Delta communities in the north – but also on Old Crow, a traditional Indian community about 105 miles north of the Dempster Highway.

The People of Old Crow

Old Crow is located on the Porcupine River, just west of its junction with Old Crow River. It lies north of the Arctic Circle, and it is the only Yukon community north of the 65th parallel. Archaeological evidence suggests that people have been living in this area for some 30,000 years, making it one of the most ancient sites of human habitation known in North America. The recent history of Old Crow is associated with that of the 19th-century fur trade, but the Indian people have long used the site for seasonal gatherings. It is a good fishing location, and the Porcupine caribou herd passes near it during spring and autumn migrations across the river.

Until the 1950s, the people who now live in Old Crow wintered in small camps of two to five families along the Porcupine River, but when a federal day school was built in the village, most of the families moved into the settlement. The present population of about 200 still depends heavily on land-based activities. Muskrat trapping is an important source of revenue for the community and every spring most of the people move out from the community to camp in Old Crow Flats for the "ratting" season. The people also fish and hunt extensively throughout the year. In 1974 Dr. J. K. Stager reported that the level of hunting intensity by the Old Crow people has remained constant over time, and that the area around the village continues to supply most of the people's needs. Of the nine species of fish regularly taken at Old Crow, salmon is by far the most important. Dr. Stager estimated that, in 1973, the people used about 30,000 pounds of fish. However, the Porcupine caribou herd is the most important of the Old Crow people's resources. The size of the herd is now estimated at between 110,000 and 120,000 animals. Dr. Stager's study showed that, in 1973, local game and fish made up 55 per cent of the people's diet.

The Old Crow people think that the northern Yukon should be protected from activities related to industrial and resource development. They are proud of their way of life, which is inextricably linked to the land. When the Inquiry visited Old Crow, the people there eloquently expressed the importance they place on maintaining their way of life. Mr. Johnny Abel declared:

...the Indians are the ones that are asking—asking to be left alone, asking to retain their heritage, their culture and their land . . . We are asking . . . so that we may live our lives as we choose, so that we may be happy and our children tomorrow can someday live in this land and be proud (37-28).

They spoke to us with pride, and they firmly believe in the value of their lifestyle. Chief John Joe Kay told us, "even the small children goes out to Crow Flat and start trapping now and, when they come back to town like that, they're very proud of whatever they get out of their own land" (37-7). Mrs. Effie Linklater testified: "It's a good life, a clean life, mostly depending on caribou, moose, fish, ducks, and fur-bearing animals, which we use for our needs" (37-25). Any threat to their land, to the animals they depend upon – caribou, moose, bear, muskrat, and fur-bearing animals – or to the fish that fill their lakes and rivers, is regarded by the Old Crow people as a threat to themselves and to the way of life that has sustained them for so long and to the values they hold.

The Old Crow people are rightly and deeply concerned about the effect that any economic development may have on their land and their way of life. The fears they expressed to the Inquiry are not fears of the pipeline only. They regard the Dempster lateral as a more generalized threat. They foresee that intensive use of the Dempster Highway and of developments associated with it will spell their doom. They fear that construction of the Dempster lateral will catalyze their fears into reality. The construction of a pipeline along the Dempster Highway will bring thousands of men and hundreds of vehicles to work along this route, and there can be no doubt that it will be what the people of Old Crow fear most, a massive intrusion by industrial society into their land and into their lives.

They fear that development activity – or simply heavy traffic – along the Dempster Highway would interfere with the Porcupine caribou herd's migration pattern. In the fall, the herd must cross the road to reach a large part of its winter range, and in the spring, the herd returns to its calving grounds on the north slope. If the herds are obliged to abandon these ranges because of highway traffic and other industrial activities, especially pipeline construction, altered migration routes may effectively deprive the Old Crow people of caribou, and

the herd itself may be quickly reduced to a remnant. Mr. Lazarus Charlie explained: "We're very much afraid that if the pipeline ever goes through this caribou migrating grounds, the caribou might take a different route and make it hard for the people" (37-105).

In our discussion of the Porcupine caribou herd, we indicate that it is not absolutely certain that traffic along the highway will interrupt its migration routes, substantially reduce its winter range, or drastically diminish the size of the herd, but there is good reason to fear that all of these effects may be realized. Should this happen, the people of Old Crow and of other communities that depend upon this herd will suffer serious economic and social hardships. The people of Old Crow are quite right to fear two serious dangers from increased activity along the Dempster Highway: a substantial decrease in the winter range of the Porcupine caribou herd and a substantial increase in the number of caribou taken annually by persons using the highway.

The Old Crow people also realize that the effects of the proposed pipeline along the Dempster Highway will not be restricted to caribou. Pipeline construction will bring with it heavier vehicular traffic and more people. There will be hunting and trapping along the highway, renewed oil and gas exploration on the Eagle Plain and Old Crow Flats, in addition to seismic lines and the construction of side roads.

Ms. Linda Netro declared that when "the pipeline comes through there will be more people settled here and [they] will not have respect for the land. They will pollute the land and the water" (37-142).

Ms. Lorraine Netro summarized her people's fears very well.

If the proposed pipeline comes through, they [the Indian people] will suffer more from fast development, high rise in population because of the workers who will come up from the south. Also, the pipeline will probably cross some of the trapping, hunting and fishing grounds which any Indian person do not like

The Dempster Highway is damage enough without a pipeline, because in the future when traffic begins, it will scare the caribou off in another direction. We really depend on the herd that comes here in the spring and fall for our meat supply for the winter.

It's much better than buying expensive beef meat at the store. The Dempster Highway is opening up the most northerly part of the Yukon to southerners. This can lead to extinction of the caribou herd and other fur-bearing animals, because some people just like to kill for the fun of it or to brag to their friends and say they got an animal all by themselves. We must be able to control these kinds of people.

The Dempster Highway may some day lead to a road into Old Crow. I hope this will be many years from now, if and when ourselves are ready for the change. We would like to live and develop our environment at our own pace after the land claims settlement (37-157-59).

To the Old Crow people and to this Inquiry the potential threat posed by the opening of the Dempster Highway and especially by the construction of a Dempster lateral is very real. To paraphrase Mr. David Joe, who represented the Council for Yukon Indians before the Inquiry, we have seen and heard about the way the Old Crow people live, their love for the land, their dependence upon Crow Flats and the Porcupine caribou herd, and their need to control the environment with which they live in such close harmony.

The people of Old Crow not only live close to the traditional Indian way of life, they also symbolize that tradition to many others, both Indian and White. They cherish their way of life, and they fear the threat that a pipeline represents. They may have good cause for this fear, for their survival is inseparable from that of the Porcupine caribou herd and the land that sustains the herd.

The Porcupine Caribou Herd

The Porcupine caribou herd takes its name from the Porcupine River, which flows through the northern Yukon into Alaska. This large herd, which represents about 20 per cent of the total caribou population of North America, has been described by many observers as one of the most impressive wildlife spectacles on this continent. The herd ranges through all of the Yukon north of the Ogilvie and Wernecke mountains and into adjacent parts of Alaska and the Northwest Territories. The extreme southern limit of the herd is not far from Dawson (see Figure 8).

The life of a herd of barren-ground caribou is one of constant movement. The herd spends the winter grazing on high land in the Ogilvie and Richardson mountains and in the basins of the Peel, Wind, and Snake rivers in the Yukon and the upper Chandalar River drainage in Alaska. In late April or early May, the herd begins to move northward along any of several possible routes through the northern Yukon. Two of the most frequently used spring migration routes are along the north-south axis of the Richardson Mountains, crossing the Porcupine River near Old Crow. Both of these migration routes cross the Dempster Highway.

The herd's calving grounds are on the north slope of the western Yukon and of eastern Alaska, and calving is usually over by the second week in June. By early July, the entire herd usually collects in Alaska and then it begins to move generally south and east. In the fall, large numbers of caribou usually cross Porcupine River at traditional crossing points, including places near Old Crow. Migrating or wintering caribou may be encountered anywhere along a 190-mile length of the Dempster Highway between Mile 80 and the Mackenzie Delta. There is insufficient information to identify the most important caribou wintering areas near the Dempster Highway. The future of the barren ground caribou as a species in North America is doubtful. At certain times of the year, the whole Porcupine herd depends on limited areas of critical habitat. Disturbances of these areas would lead inexorably to destruction of the herd. We were reminded that many other caribou herds have been unable to maintain their population levels when disturbed by economic developments within their ranges.

The Porcupine herd has maintained until now a healthy and relatively stable population because of its isolation from industrial development and from overhunting. This herd is characterized as one of the last great herds of caribou, a characterization which raises both fear and hope – fear that the Porcupine herd might meet the fate of other caribou herds, and hope that a heightened awareness of this possibility will encourage firm protection of the herd.

Economic Links

The herd is not only a biologically important element of the northern Yukon wilderness, and internationally important because of its migration patterns, it is also important because the people who live within its range have strong cultural and economic associations with this herd. These caribou supply most of the protein consumed by the people of Old Crow in the Yukon and of Arctic Village in Alaska. Native residents of Kaktovik, Alaska; and of Fort McPherson, Aklavik, Arctic Red River, and Inuvik in the Northwest Territories; and of Dawson and Mayo in the Yukon, also rely to some extent on this herd for food.

The native people are not the only hunters of caribou; there is also recreational hunting of the Porcupine herd in both Alaska and the Yukon. This form of hunting is estimated to take less than 10 per cent of the total annual harvest of between 3,000 and 4,000 animals, and biologists seem to agree that the herd can support

this level of harvesting. However, the annual harvest by both resident White and Indian hunters can be expected to increase with a heavier volume of traffic along the Dempster Highway and larger human populations in the Yukon, Northwest Territories, and Alaska.

The physical presence of the highway itself may not be an insurmountable barrier to the herd's movements. However, the response of the caribou to traffic on the road has not been studied. So far there has been very little traffic, but officials of the Yukon government's game branch are planning to carry out experiments to determine the reactions of caribou to vehicles travelling at different speeds and times of day, and with different spacings – that is, singly or in convoys. The potential effects of highway-based caribou hunting also need to be assessed.

Industrial Corridor

The construction of a pipeline along the Dempster Highway raises the broader question of the parallel development of an industrial corridor. Uncontrolled use of the Dempster Highway and uncontrolled development along it would probably lead to the creation of maintenance areas, commercial enterprises, camp grounds, and side roads.

There is little solid information about the behaviour of caribou in relation to highways and pipelines. Mr. Ron Jakimchuk told us that the most effective means of protecting the herd was to isolate it from contact and conflict. A paper submitted by the Yukon government that discussed proposals for the management of a development corridor along the Dempster Highway was more optimistic. It suggested that appropriate and, if necessary, strict regulation of traffic and other activities along the highway would protect the herd. However, great uncertainty as to whether such protection is possible still remains. Because of the imminent threat of harm to the herd, decisive steps should be taken now. Further research, including that proposed by the Government of Yukon, must be undertaken soon. We must learn all we can from carefully planned studies of caribou behaviour, and we urge that industrial activity along the highway not be the means of experimenting with the behaviour of the Porcupine herd.

At present, the herd exists essentially without management, but any increase in traffic, human population, hunting pressure, or industrial activity along the Dempster Highway may have disastrous

effects. The level of traffic and human activity along the highway should be controlled for several years to permit extensive monitoring of their effects on the herd. Only after this information is available can decisions be made whether or not to increase the levels of activity above whatever restricted use of the highway may at first be permitted.

Finally, we must remember that this herd also migrates into Alaska. The United States is concerned about the future of the herd and has taken decisive steps to protect a major portion of its range in Alaska. The experience in Alaska with other caribou herds has demonstrated that human disturbances and economic developments within the traditional range of a caribou herd are a principal factor in disrupting the population dynamics of the species. Use of the highway and development along the Dempster Highway should not be permitted until there is clear evidence that the Porcupine caribou herd will not be endangered, and even then, traffic increase and development should proceed very cautiously.

The Value of Wilderness

We have said before that Yukoners are proud of the land they live in, and that any other part of the world would seem second best to them. One of the main reasons for this attitude is their appreciation of the wilderness and of its wildlife. For many Yukoners, their desire to enjoy the wilderness can be satisfied by a short trip along a side road or a canoe trip along one of the Yukon's unspoiled rivers. But others view the wilderness from a different perspective and on a larger scale. They take special pride in the knowledge that most of the Yukon north of Dawson still is virtually untouched wilderness. We recall the words of Ms. Eleanor Millard, legislative assembly member for the Ogilvie Riding, when she spoke to us in Dawson about the area through which the Dempster Highway passes:

I wish for your sake, and for ours, Dean Lysyk, that your time allowed you to go up the Dempster Highway. I wish that you would be able to stop and light a campfire and listen to the silence, broken only by the bird calls; to be moved by the drama of our untouched wilderness; to look in awe at hundreds of miles of virgin mountains and valleys. I would wish for you enough time to allow this wilderness to renew your soul, to let the remnants of thoughts of business and argument wash away down the river beside you (26-3096).

We do not dismiss these values, nor do we think that any further inquiry can resolve differences between persons who hold such values and those who do not.

In this Inquiry, we have focussed considerable attention on the wilderness area along the Dempster Highway, between Dawson and the Richardson Mountains. Until recently, distance and inaccessibility have been the main protection for this and other areas of northern wilderness. But now this form of protection is threatened by various proposals for construction and economic development. We think the philosophy that "regardless of how hauntingly beautiful a wilderness area may be, it serves little purpose in the overall scheme of things unless it is enjoyed by people" (50-7230) should be balanced by an intelligent sensitivity to the problems that roads and other developments cause in wilderness areas.

Roads into wilderness areas have many adverse effects on wildlife. First, the noise and smells of highway construction drive animals away. Following construction is the increased human activity and the almost certain hunting, harassment, garbage and adverse effects of feeding wild animals. These impacts can be minimized through regulations.

Secondly wilderness roads destroy habitat. Not merely that part used by the road, but the roads passage through critical areas to wildlife such as salt licks and calving areas.

Thirdly are the problems created by opening up previously inaccessible areas, leading to branch roads, use of all-terrain vehicles, snowmobiles and illegal or legal hunting pressure. However not all roads are bad. There are certain areas of the Yukon that could benefit from increased hunting pressure on moose, but the same idea is not true of other species such as sheep and goats (Exhibit 114, *Dempster Highway Seminar*, p. 4).

Along the Dempster Highway, caribou, grizzly bear, Dall sheep, and peregrine falcon are common species. Caribou, wolf, and grizzly bear need large areas of wilderness to survive—some endangered species, such as the peregrine falcon, live only in special isolated habitats. All of these species add to the attraction of a wilderness area, but access by road into a wilderness to view them can hardly be justified if such access threatens their habitat. Protection of these species should be an important objective, even if their protection denies access by road, or restricts industrial development.

The Dempster Highway passes through an area in which these issues must be resolved. Wilderness protection requires laws as well as planning. The protection of wildlife, and of the wilderness value of the lands adjacent to the highway, will require rigid regulations to control tourist facilities and other forms of land use. Although this Inquiry did not, at first, expect to hear evidence on or opinions related to these subjects, we now believe that the feasibility of a

pipeline along the Dempster Highway might be affected by the importance placed on wilderness values as a goal for land management in the northern Yukon.

Recommendations

In summary, we recognize that the national interest may require the transmission of natural gas from the Mackenzie Delta and possibly from the Beaufort Sea to southern Canada by the mid-1980s. Public attention has focussed on two possible routes to transmit this gas. However, one route, that along the Dempster Highway, cannot be considered a feasible alternative at this time for two reasons.

First, there is not sufficient information, nor has there been adequate study, of the Dempster Highway as a pipeline route. Further environmental, economic, and social research is necessary before this route may be seriously considered as an alternative to a pipeline along the Mackenzie Valley. There is an urgent need for detailed and extensive studies on the Porcupine caribou herd, and for studies of the probable impact on the herd of increased human activity along the Dempster Highway. Time is essential to permit adequate study of these subjects.

Apart from the Porcupine caribou herd, there are other environmental consequences of a pipeline along the

Dempster Highway that must be studied. No doubt much may be learned by the experience of constructing a pipeline across the southern Yukon, but, until we know much more about the Dempster Highway route, we cannot make an informed comparison of the advantages and disadvantages of that route and the one along the Mackenzie Valley. We therefore recommend that at least five years be given to studies of this nature.

The second reason why the Dempster Highway route cannot at present be regarded as a realistic alternative relates to the potential volume of Canadian gas available for transmission to southern Canada. Mr. Blair, President of Foothills, told us that any choice between the two routes would have to await the results of exploration for and discoveries of natural gas in the Mackenzie Delta and Beaufort Sea. If substantial gas discoveries are made, large volumes of Canadian gas could not be accommodated by the main pipeline carrying Alaskan gas through the southern Yukon, and in that case, the Dempster lateral still would not be a realistic alternative to the Maple Leaf route.

Finally, the fears expressed by the people of Old Crow cast serious doubt on the acceptability to them of a pipeline along the Dempster Highway, now or at any time in the future. The survival of their way of life cannot be easily balanced against the national interest, but the Dempster lateral should not be thought of as an alternative to the Maple Leaf line until compelling evidence demonstrates that the people of Old Crow, and their way of life, will not be casualties of the project. If a choice must be made, it should not be made prematurely.

10 Planning and Regulation



First Yukon Territorial Council outside the Dawson City Administration Building, 1909 (Yukon Archives)

Main Street, Whitehorse (Whitehorse Star)

Yukon government executive committee members, from left to right, Dan Lang, responsible for education; Ken McKinnon, responsible for local government; Commissioner Art Pearson, and Flo Whyard, responsible for health and welfare present evidence to the Inquiry (Whitehorse Star)



Whitehorse Mayor Ione Christensen and Alderman Maggie Heath (Whitehorse Star)

Yukon Hall, home for many out-of-town natives attending school in Whitehorse (Council for Yukon Indians)



Introduction

Central to the concerns expressed by Yukoners to this Inquiry is the need to create a strong and effective regulatory agency if the pipeline is built across the southern Yukon. Indeed, the assumption that there will be an effective regulatory agency to minimize adverse social, economic, and environmental impacts of the pipeline project must be understood as fundamental to any acceptance of or support for the proposed pipeline. The people of the Yukon in their appearances before this Inquiry have placed the responsibility squarely on government to devise and implement a regulatory structure that is capable of controlling the project. Similarly, the judgment in this report that the social, economic, and environmental impacts of the proposed pipeline can be kept within acceptable limits is advanced only in the belief that the government will move at once to establish such a regulatory agency.

We therefore recommend that the government address itself to the matter of devising an appropriate regulatory structure, hereafter called the Agency, which will reflect the concerns expressed in this report, and will be organized in a way that is consistent with the evolution of responsible government in the Yukon and with Indian participation in it. The central responsibility of the Agency will be to ensure that the proposed pipeline is built safely. The Agency must also protect interest groups that are directly affected by the pipeline and that, in some cases, will be participants in activities that the pipeline involves or precipitates. The Agency should review both the preliminary and final design of the pipeline; monitor the Applicant's activities in both the spirit and the letter of the terms and conditions attached to the granting of a right-of-way and approval of construction; assess the activities that are necessary to keep the impact of the project within acceptable limits and closely related to the government's priorities for the Yukon; and enforce the obligations imposed upon the Applicant.

The planning and regulatory process should be limited to a level of involvement that is sufficient to minimize the burdens likely to be suffered by Yukoners from the pipeline project, while maximizing the benefits that they can derive from it. At the same time, the Agency must maintain the integrity of the project and serve the public interest. The challenge is to devise a regulatory structure that will be in harmony with the values and institutions of the people affected by the project, and that will, nevertheless, effectively ensure, when the project is completed, that it will have dealt fairly with all

interests, and that the national interest, which prompted the project, is satisfied. The Agency must be acutely sensitive to cultural, social, and economic priorities and realities in the Yukon. These priorities and realities must inform the Agency from its creation; it should not be imposed upon them. The Agency must meet the deep-seated skepticism on the part of many Yukoners as to whether or not the government, through the Agency, will be able to regulate this project effectively. Many Yukoners have had previous experience with major economic developments over which there were no effective, comprehensive, and sensitive controls.

There is a need for positive, anticipatory, and representative forms of control that give all concerned parties the power to intervene at every stage. The emphasis must be not on negative and reactive regulation, but on the anticipation of problems and on the solution of them in a way that will serve the common interests of the Applicant and Yukoners. Although the success of the Agency will depend on the cooperation of all parties, it will also depend on the Agency having clear authority to protect the interests of all Yukoners.

Although the Yukon has long had institutionalized means of dealing with major developments in the region, the existing infrastructure of the Yukon may not be capable of regulating an undertaking as massive as the proposed pipeline. Over time, regional institutions could grow in size and in flexibility so that they could regulate a project such as the pipeline, but there is not enough time for such growth to occur. The need for regulation is immediate upon approval-in-principle of the pipeline. Consequently, it is necessary to create a project-specific agency to deal comprehensively with the regulation of the pipeline. One advantage of a project-specific agency is its ability to limit the degree of prejudice to the normal growth and development of regional political institutions. If these institutions were required to regulate this project, the expansion could distort their normal development, perhaps irreparably. It would be likely to influence all other regional government activities, and many on-going activities would suffer. It would also bias the development of new regional structures.

Reliance on the new Agency, rather than on existing regional institutions, will carry its own costs. Massive projects, such as the proposed pipeline, require a good deal of centralized power, which will substantially diminish the autonomy of existing local institutions. Indeed, such interference with local autonomy may be the most significant social impact of the pipeline. Professor Larry Pratt described an analogous situation in the Fort McMurray area:

This may have implications for the Yukon, where I understand that political autonomy is sometimes contentious. Is there anyone who shares the belief that a loss of autonomous decision-making authority in a hinterland community to metropolitan interests, interests that have the weight of the state behind them – does anyone truly believe that this kind of cost can be quantified and compensated for in dollars? (40-5212).

This social impact is largely unavoidable. The Council for Yukon Indians drew attention to this paradox: to control the social, economic, and environmental impacts of the proposed pipeline, Yukoners will be forced to give up more of their freedom to stronger administrative authority. There is an understandable fear among Yukoners and their elected representatives that a probable consequence of the pipeline, one that must be guarded against, is the creation of a government structure that will interfere unduly with the sense of freedom and of self-determination that is central to the aspirations of Yukoners. In the process of regulating the project, the Agency cannot be allowed to transform itself from an institution designed to minimize impacts to an institution that itself causes unnecessary impacts.

The need for an imaginative and fresh approach to the problem of regulating the project can be demonstrated by examining the complexity of the task. One federal study has identified 87 activities and legislative responsibilities belonging to nine different departments and agencies of the federal and Yukon governments that would be relevant to pipeline construction. The achievement of an acceptable degree of coordination and reconciliation among these many requirements and authorities requires a complete and fundamental reassessment of the best means of regulating a project of this magnitude.

We recommend the creation of a project-specific regulatory agency with comprehensive powers. Not only must the project be regulated in a way that is consistent with the best interests of all Yukoners, it must also be regulated in a way that will coordinate completion of the Yukon portion of the pipeline with the portions through Alaska and British Columbia. Engineering and environmental considerations do not change with political boundaries, and dealing with these considerations will require coordination with other authorities. This problem is not new. For example, the existing jurisdictions of Environment Canada and of the National Energy Board extend south of the 60th parallel, where coordination procedures within the provinces between the federal and provincial authorities have been in operation for some time. Once the principle of a single regulatory agency for the Yukon is accepted, it will then be necessary to consider the federal-provincial-territorial aspects of its work.

The general tone of this chapter is optimistic. We suggest that a positive and imaginative approach to the regulatory process can lead to effective control of the project and ensure that the negative impact of the project on Yukoners is kept within acceptable limits. However, a word of caution should be spoken on the limits of planning. Projects of this type inevitably lead to some consequences that cannot be avoided by planning. We must not expect too much of planners and regulators. Unplanned consequences will be among the unavoidable impacts that Yukoners must accept, but enlightened and forceful regulation will go a long way towards minimizing these impacts.

A second word of caution must be directed toward the scope of the Agency's work. No matter how effective the Agency may be in regulating the impact of the pipeline, it will not be able to correct all the perceived deficiencies of government programs in the Yukon. Although the principles we describe below as essential to a responsive and effective regulatory process for the Yukon may provide directions for responsive government institutions, the Agency cannot be expected to expand its mandate beyond the regulation of the pipeline. Indeed, to attempt to go further would be an unwarranted and undesirable intrusion by the Agency into the processes of government.

A Single Agency

The regulation and control of the proposed pipeline will be an immensely challenging task, and it will go well beyond the technical aspects of traditional regulation of large-scale projects. The scope of the regulatory function will include, by definition, the social and economic aspects of the project. Existing institutional arrangements are inadequate to cope with the intensive efforts required to regulate the project, because effective regulation requires more than increasing current efforts at coordination. Without a single regulatory authority, the expertise of individual departments and agencies that may have a partial responsibility for regulating the project would be dissipated.

The Agency must represent all federal and regional government interests, as well as the interests of all Yukoners, and it must be able to respond immediately to problems that arise. The case for a single agency was well made by the Working Group on Government Operations during Northern Pipeline Construction in its *Discussion Paper on Option No. II* (1976):

The basic idea behind the concept of a Single Agency is that the multi-faceted regulatory role of governments during pipeline construction be brought together under single management. The underlying thinking is that the tremendous size and impact of pipeline construction in a remote area of social sensitivity, environmental fragility, and engineering difficulty demands an imaginative approach by governments to ensure the project is properly controlled on a day-to-day and activity-by-activity basis, in the public interest. There is a real danger that an unimaginative response to the situation could lead to unsatisfactory regulatory controls, unnecessary construction delays and general frustration within both the pipeline company and the government agencies involved. Also, public interest groups monitoring the progress of construction would not accept an ineffective regulatory regime (p. 3).

This aptly summarizes the reasons for our recommendation that the Government of Canada establish a single regulatory authority (the Agency) to regulate and control all of the technical, environmental, social, and economic aspects of the proposed pipeline project. The Agency would provide efficient and effective regulation of the project and would clearly identify the seat of regulatory authority to the Applicant and to any other interested parties. The Agency should be empowered to grant all of the authorizations and permissions that may be required for the construction of the pipeline. The Agency should administer and enforce all relevant acts, regulations, ordinances, orders-in-council, accords, executive agreements, codes, and standards that may apply to the pipeline project and to its related facilities, including all of the terms and conditions that may be attached to the grant of a right-of-way.

Successful regulation of this project will require all aspects of the project to be considered. All of the social, economic, environmental, and engineering aspects of the project must be considered by a single agency to ensure that no particular aspects of the work are considered at the expense of the others. There must inevitably be compromises between engineering and environmental considerations, or between economic and environmental considerations, or among any combination of considerations. These trade-offs and compromises will involve values and judgments that will not clearly dictate any one right answer. The only way to ensure that these choices are made in the best interests of all Yukoners, and in keeping with the integrity of the project, is to place them all before a single decision-making authority.

For the Agency to regulate all the environmental, engineering, social, and economic aspects of the project, the National Energy Board should transfer to the Agency its traditional supervisory responsibility for

the engineering and construction of the pipeline. At the same time, it is essential that this supervisory responsibility be exercised by the Agency as effectively as it would be carried out by the National Energy Board. Therefore, because of the Board's experience and its responsibility for other pipelines, there must be a close liaison between the Agency and the Board. We recommend below that this liaison be effected by the appointment of a member or representative of the National Energy Board to membership on the senior level of the Agency, by the appointment of a senior member of the Board's staff to the Agency's staff, and by the power and authority to second those experts from the Board necessary to accomplish these tasks.

Government departments and agencies may be reluctant to give up their regulatory powers and functions to the new Agency, which can, of course, have no demonstrated experience in carrying out the task. Departments and agencies that take pride in their work and in their responsibility for it will be reluctant to give up their authority because they will fear that they must continue to bear the responsibility if the new Agency is unsuccessful. Nevertheless, the consequence of failing to centralize the necessary regulatory powers in the Agency will be the dissipation of the expertise that the various departments and agencies wish to retain. Furthermore, the existing expertise could not overcome the dysfunctions caused by inadequate coordination among the multitude of existing regulatory responsibilities. Consequently, federal and territorial government departments and agencies must be prepared to cede part of their existing authority to achieve effective, efficient, and fair regulation of the project. Any inclination to fragment the authority required by the Agency must be resisted.

Some have suggested that operational authority might be delegated to the Agency, while existing departments and agencies retain their functional authority. In this context, operational authority refers to the implementation and management of specific programs, and functional authority refers to the interpretation and development of the regulatory policies themselves. The distinction cannot easily be made, and any attempt to make it would fragment the authority the Agency must have for its work.

The regulation of any large venture is extremely difficult because of its complexity. With the proposed pipeline, normal difficulties will be aggravated by the novelty and unique technical aspects of the project, the remoteness of its location, the severe environmental constraints, and the social and economic problems of the Yukon. Despite the obvious need for the Agency, its impact on normal government institutions in the Yukon must be kept to a minimum by clearly defining its

nature, purposes, and geographic scope. The Agency's mandate will be limited to the regulation of the construction of the gas pipeline. To the extent possible, its authority and decisions should be limited to the pipeline corridor and should not extent to the whole of the Yukon. The onus for any expansion of this mandate, to include contemporaneous or subsequent projects or developments, should rest with the Parliament of Canada and no expansion should be contemplated without adequate demonstration that it is warranted.

The suggestion of creating a single project-specific regulatory authority is not new. Similar comprehensive authorities have been established to plan and regulate massive projects undertaken in regions that do not have fully developed governmental institutions. Two examples may be cited. Two project-specific agencies, one federal and one state, the Alaska Pipeline Office and the State Pipeline Coordinator respectively, monitored and regulated construction of the Alyeska pipeline in Alaska. The considerable success achieved in moderating the environmental and engineering effects of the Alyeska project may be attributed to the fact that authority for these aspects of the project was concentrated in the two agencies. Despite the constitutional and jurisdictional difficulties that led to the creation of parallel federal and state agencies in Alaska, these agencies achieved their greatest successes when they were able to coordinate their policies. The State Pipeline Coordinator, mentioned above, recently declared that he believes the public interest would be best served by a single federal-state agency to monitor pipeline construction.

The Government of Alberta has taken the same approach to the planning and coordination of Syncrude's development of the Athabasca tar sands near Fort McMurray. The Northeast Alberta Regional Commission Act created a special commissioner, who has charge of planning and coordinating development in the region. Under this legislation, the Commission has the authority to by-pass local authorities on a wide range of matters within provincial jurisdiction.

that they must be included within the Agency's authority, from activities that are only incidentally related to the project and may be left within existing institutional arrangements. The magnitude of the pipeline project will dwarf many existing institutional programs which would be related to construction of the pipeline, and the responsibility for many of these programs may have to be transferred to the Agency. Delineation and definition of the Agency's function is, however, a prerequisite to its ultimate success. Only if the Agency has appropriate powers will it be able to perform its regulatory function. But determining the range of this function is also difficult, both because of insufficient data on the nature and magnitude of the probable environmental, social, and economic impacts of the project and because not even preliminary strategies have been formulated to minimize these impacts. A final definition of the scope of the Agency's powers must wait until more planning and research have had time to go forward. Although it is not possible at this time to make a final assignment of powers to the Agency, it is urgent that, as planning and research continue, the goal of creating an agency with authority sufficient to regulate the project effectively is kept in mind.

The Agency must proceed with the work of regulation in a flexible, positive, and anticipatory way, for regulation is not simply a reaction to problems that the project has caused. The early recognition and definition of problems, and the rapid development and implementation of solutions must be emphasized. With sufficient time to prepare, there is a high likelihood of finding solutions that will be mutually advantageous to the pipeline company and to Yukoners. The Agency will have to continue to monitor the effects of each decision and program, and to modify them when necessary. If other regulatory measures are required, the Agency should identify the need and how it must be satisfied.

The development and implementation of regulatory policies need not be done exclusively within the Agency. Policy proposals may well come from existing federal or territorial government departments or from interested third parties. Similarly, the implementation of a policy that the Agency has developed and reviewed may be best left to an existing government authority.

The most critical power vested in the Agency and reserved exclusively to it is the power to review, comment on, and approve policies. Only by having ultimate control over the initiation of policies related to the pipeline impact can the Agency ensure that all policies and programs are adequately coordinated and that all of the various interests have been considered.

Scope and Function

Although we can assert with confidence that there should be a single, comprehensive regulatory authority to control construction of the pipeline, it is more difficult to define, at this stage, the boundaries of its authority. No ready formula can be drawn upon to distinguish activities that are so central to the project

The function, scope, and form of the Agency and of its planning and regulatory tasks, may vary over time. Later in this chapter, the question of timing, both for the creation and the termination of the Agency, will be discussed. At this point, we shall say only that the Agency should be created coincidentally with the approval-in-principle of a pipeline corridor through the southern Yukon, and that it should continue to exist until sometime soon after gas first flows through the pipeline. The Agency's responsibilities will begin with the initial planning stages, and they will continue through authorization, surveillance, and monitoring of the pipeline's construction. As the project progresses, the regulatory and enforcement functions of the Agency will gradually supersede, and then replace entirely, its planning functions.

Once the planning process has been completed, a route selected, and programs have been designed and implemented to minimize social and economic impacts, the Agency must carry out at least four primary control functions to discharge its mandate adequately:

Preliminary Design Review Interventions from third-party interests will be appropriate and most effective at this stage. Changes prompted by these parties can be made most easily at this point and incorporated into both the contracts for materials and services, and the scheduling of the project. Design review must be a flexible and on-going process that involves all interested parties so that the third parties, in particular, will be able to define their priorities in the light of their perceptions of the evolving project.

Final Design Review The Agency's final review will follow the Applicant's submission of a design that will include all of the revisions agreed upon previously. Here again, third parties will have an opportunity to recommend modifications before the final design is approved.

Permission to Construct The Agency will give on-site permission to proceed with portions of the construction activity, once its representatives on the site are satisfied that all filed design specifications have been met.

Surveillance and Monitoring of Construction Activities The Agency will undertake traditional on-site inspection to ensure that the Applicant and its contractors have complied with all applicable regulations and stipulations. The question of enforcement is treated below in greater detail.

In addition to these four primary functions, which are essential to the regulation of pipeline construction,

there are numerous additional functions that should be assigned to the Agency, even before further investigation and analysis of social, economic, and environmental impacts are completed. For example the management of a Manpower Delivery Service, as proposed in Chapter 5, and other pipeline-related employment should be assigned to the Agency.

Similarly, design and review of programs and of policies intended to limit in-migration to the Yukon should be assigned to the Agency, because the success or failure of these controls will, in large part, determine the magnitude of the project's social and economic impacts on the Yukon and its people. Although the control of in-migration would involve regulation by the Agency of Foothills' advertising program to discourage unwanted in-migrants, the Agency's involvement need not preclude the participation of other persons or institutions in the regulatory task. The Agency must be able to include the interests and concerns of other parties in its activities and, in the case of the advertising program, the Government of Yukon may be expected to take an interest in it to ensure that it is consistent with the Yukon's continued goal of attracting tourists. But on all questions that are directly related to the project's impact, such as in-migration, the Agency must be the final authority for approving, rejecting, or modifying a program.

The Agency must begin immediately to remedy the deficiencies, described more fully elsewhere in this report, in base-line data on the economic and social life of the Yukon. It will be impossible to regulate, to plan effectively, or to monitor the impact of a pipeline in the Yukon without substantially more information of this kind. To ensure that effective use is made of the data collected, the Agency should supervise pipeline-related research undertaken both by government departments and by the Applicant. Much of this research should be community-designed and community-conducted to ensure that it does not interfere unduly with people's daily lives. Not only will community participation enhance the quality of the research, and the usefulness of its results, it may also be an aspect of third-party involvement in the regulatory process, the need for which is described below.

The foregoing, although far from offering an inclusive list of the Agency's powers and functions, gives an indication of their nature and scope. At all times, the Agency must emphasize the participatory and flexible nature of the regulatory process. It must always look for imaginative and creative approaches to what are sure to be extremely difficult problems.

The Second-Stage Inquiry

The terms of reference of this Inquiry make clear that, if approval-in-principle is granted to construction of a pipeline across the southern Yukon, there will be a second-stage inquiry to prepare a final socio-economic impact statement upon which specific terms and conditions could be developed for the construction and operation of the pipeline. A similar indication is included in the task assigned to the Environmental Assessment Panel, and it is therefore expected that there will also be a second-stage inquiry in respect to environmental concerns. The National Energy Board has directed Foothills to undertake further studies of the expected impact of the pipeline in the southern Yukon and, in particular, to assemble social, economic, and environmental information related to a possible route along the Klondike Highway, the so-called Dawson diversion. No doubt there will be other government departments and agencies studying various aspects of the southern Yukon in anticipation of construction of a pipeline through the region. To avoid a proliferation of inquiries in the southern Yukon over the next few years, we recommend that the tasks of these further inquiries be assigned to the Agency.

As we have said above, the Agency should be created at the same time that the approval-in-principle of a pipeline through the southern Yukon is granted, for, with the grant, a number of regulatory tasks must be undertaken immediately to avoid prejudice to various interests in the Yukon and to design and implement measures to mitigate the impact of the project. These regulatory and planning processes could with advantage be combined with the second-stage inquiries, not only to avoid a proliferation of investigators in the Yukon during the next few years, but also to focus attention on and to demonstrate from the start where the regulatory authority for the pipeline project resides.

At the same time, the Agency would begin to develop the expertise needed for effective regulation by engaging immediately in the collection of data that would be necessary for the second stage. If the independent inquiries are initiated at this time, the information gained will eventually have to be transferred to the Agency, but if the information has been compiled by separate groups, each using its own system, the transfer could prove to be both time consuming and confusing. With all the information collected during the second-stage investigations immediately available to the Agency, it could begin to approach the environmental, engineering, social, and economic issues in an informed manner, and with a

developed sense of priorities at the earliest regulatory stages.

Finally, it may well be easier for the Agency to obtain the services of the most able staff if it is assigned a broad range of responsibilities and functions at an early date.

If this recommendation is accepted, and if the second-stage inquiries are merged and made the responsibility of the Agency, then three specific tasks should be assigned to the Agency immediately. First, as we recommended in Chapter 4, the choice of a pipeline route through the southern Yukon should be left open for further study for a limited time period. There could be no more appropriate body than the Agency to carry out the investigations necessary to make recommendations on the route to the Cabinet. Second, the Agency should be required to present detailed social, economic, and environmental impact statements on the route that is chosen. Third, the Agency should be required to recommend a set of terms and conditions for the construction of the pipeline. These terms and conditions must finally be reviewed and approved by the Cabinet, but the Agency is the most appropriate body to formulate them.

Participation

There must be adequate guarantees of participation by Yukoners in all aspects of the regulatory process. Without such participation, decisions emanating from the Agency may fail to reflect the values of Yukoners, or to do justice to the people most affected by the decisions, or to conform to reasonable standards of efficiency. With adequate participation by Yukoners, regulatory decisions and policies can be expected to be more sensitive and meaningful, and the regulatory process itself will enhance the Yukoners' sense of community. As one author has stated:

The inclusion of individuals in decision processes which affect them, forces them to take into account the interests of others. Individuals gradually expand their perspectives, first beyond the boundaries of their individual interests, then beyond the interests of their organizations. This offers the hope that everyone could develop the notion of community interests (Thayer *Participation and Liberal Democratic Government* (1971), p. 18).

Through participation in the regulatory process, Yukoners will expand their understanding of one

another's interests and priorities, and they will be more prepared to seek other areas of common interest.

Whereas, in highly populated areas, it is difficult to elicit widespread participation in public discussions, or to formulate positions that are genuinely representative of the public, in the Yukon, with its relatively small population, it is realistic to look to Yukoners for their views and assistance, and to speak of community involvement as contributing to the design of regulatory policies that are in keeping with the needs and aspirations of Yukoners.

The benefits and opportunities derived from participation of people in decisions that affect them have often been stated, but are worth repeating here to emphasize their importance. Participation by all interested parties is necessary to ensure that conflicting interests are fully represented before the decision-making body. Only by balanced representation can truly representative decisions be made. Participation offers the possibility both of greater public confidence in the decision-making process and of greater acceptability of the decisions that flow from it. Such acceptability is likely to lead to an orderly implementation of the decisions. Many of the Agency's decisions will involve not only technical questions, but also conflicts of interest in which value judgments must be made. These value judgments will be accepted by all Yukoners only if there has been full articulation of the conflicting views before a decision is made. Participation will also promote the idea of the political equality of all persons in the Yukon and provide an opportunity for involvement in a decision-making authority which will, for a time, affect their everyday lives.

There has been criticism of participatory decision-making on the grounds that it delays reaching decisions, that its costs outweigh its benefits, and that it introduces irrelevant or unreliable information to the discussion. We, however, say with confidence that the advantages of participation far outweigh these criticisms. The costs and delays introduced by increased participation are relatively minor, when compared with the expense and delay associated with prolonged opposition to an unacceptable policy. Slow participatory processes are likely to be economical over the long run because they tend to prevent unacceptable and ill-informed decisions.

The Agency will be most successful if it can combine the expertise of its staff and researchers with the expert knowledge of Yukoners, many of whom have generations of experience with the land and its people. This form of participation was evident at hearings before this Inquiry. At Pelly Crossing, for instance, Mr.

Silverfox raised the question of underground peat-moss fires and their potential effect on a buried gas pipeline. In the exchange between Mr. Silverfox and a representative of the Applicant, it became clear that the latter was unfamiliar with this phenomenon. The point here is not the potential threat of peat-moss fires to the pipeline, but rather that Yukoners' experience with and knowledge of local conditions may raise technical matters that the Applicant and its consultants have overlooked. This form of contribution supports the argument for making the Agency open and accessible to all those interested in contributing to it.

Participation in the regulatory process should be institutionalized in at least four ways. First, the membership of the Agency's highest decision-making level should be composed of four or five persons: an appointee of the federal government as chairman, a member or representative of the National Energy Board, and two or three appointees of the Government of Yukon, one of whom is to be chosen from a list nominated by the Indian people through their representatives. Institutionalizing participation will make clear, in both real and symbolic terms, that Yukoners will have a prominent role in the regulation of the pipeline project. The appointees from the Yukon will bring to the Agency's decisions sensitivity of and knowledge of the Yukon and its people. The special decision-making positions of the federal government, the territorial government, and the people of the Yukon, and their right to be represented on the board need no justification. As Professor Thompson has explained:

In broad terms, the institutional situation can be summarized as one where the federal government, represented mainly by the Department of Indian and Northern Affairs, has legislative, political, and legal authority with respect to the lands affected by the pipeline, the Commissioner and the territorial government have political and administrative authority over some of the lands to be affected by the pipeline, and the native communities will have ownership rights with respect to substantial portions of the lands required for a right-of-way or other operations connected with the pipeline. Individual residents in the towns and villages, whether native or non-native, have obvious interests in the pipeline, but in general they have no legal or administrative right with respect to the affected lands other than in a few isolated cases where operations may infringe on privately owned land. (MVPI, F196-30855)

Second, participation should be used to arrange for the appearance of interested parties before the Agency, so that they may comment on matters of particular concern to them. There is no need to limit the range of interested parties. It is in this way that one would

Mary's Hotel on Bonanza Creek during the Klondike Gold Rush
(Public Archives of Canada)

Third Street in Dawson City in 1899 (Public Archives of Canada)

Hydraulic operations in the Klondike, 1910 (Public Archives of Canada)

Carcross, once the transfer point from train to streamer for people and provisions heading north (Public Archives of Canada)



expect business interests, environmentalists, private organizations, and individual communities to participate in addition to the presumably active participation of the Government of Yukon and the representatives of the Yukon Indians. The objective must be to provide opportunities of one form or another for all interested parties to examine and comment on the Agency's important decisions. The mere right to participate is not sufficient to ensure effective participation. In addition to that right, participating groups must also receive financial support for their activities, and they must have access to the information relevant to the decisions. Participants must also be able to rely on the Agency's staff and research capacity to obtain information and support for the articulation of their positions.

Third, Yukoners must be represented at all levels of the Agency's staff. Not only will this guarantee provide job opportunities for some Yukoners, it will also contribute substantially to the quality of the Agency's regulatory decisions by ensuring that they can draw on the special knowledge of the Yukoners and their compassionate understanding of the needs of their fellow Yukoners.

The fourth way in which the participation of Yukoners in the regulatory process should be institutionalized is through granting the Agency the discretionary power to create advisory councils, composed of representatives of interested parties, to respond to particular problems and situations. This form of participation would offer a flexibility that will often be necessary to ensure the representation of all interested parties. On the other hand, advisory councils should not be seen as a substitute for the other forms of participation. They alone would not guarantee that Yukoners will be adequately represented in each and every one of the Agency's decisions; rather it will be only through the combination of all four forms of participation that Yukoners will have this assurance.

Funding of Participants

In addition to providing a wide range of institutional arrangements for active participation by interested parties, the regulatory process must also provide financial support to interest groups to make their participation meaningful and continuous. Funds will be required for research, the preparation of briefs, and the actual appearances before the Agency. It is essential, if a balance of interests is to be achieved, that parties who wish to participate in a decision are not hindered

by their inability to command the necessary financial support. This ability – or lack thereof – will vary from group to group. Large institutions, such as the Applicant and government departments, will not be prevented from participating for lack of resources. However, dispersed groups, whether small or large, that cannot raise contributions from their members would be unable to raise sufficient funds to participate. To circumvent this problem, various funding mechanisms have been developed in other settings to ensure balanced and representative participation in the administrative processes. One of the clearest indications of the federal government's recognition that interest-group participation must be supported is that both the Mackenzie Valley Pipeline Inquiry and this Inquiry were provided with funds to distribute among interest groups that testified during the hearings.

Funding for participation in the activities of the Agency must start as soon as the approval-in-principle of a southern Yukon pipeline is granted so that the collection and assembling of the base-line data, necessary to both the Agency and the parties before it, may begin at once. Only after enough of this information is at hand will the regulatory process take on meaning, and only with sufficient funds and time can this research be accomplished properly. The disbursement of funds received by interest groups should be left largely to the discretion of the groups that receive it. In the preliminary stages of this project, some of the activities funded by such groups may appear to be tangential to the project. However, such spending should not be discouraged, for one way to strengthen and give meaning to the participation of interest groups is to let them decide how to spend their funds to protect the interests of their groups.

The principle of funding interest group participation is, we think, beyond dispute. The difficult questions relate to the amount of funding and the criteria for selecting the groups that will receive support. At this stage, we can only suggest that funding be generous and that all parties with a legitimate interest in participating should receive some support.

Funding for participation in the regulatory process should also be provided on a community-by-community basis. Different communities will suffer different economic and social impacts, depending on their location, and their present level of development. Separate funding tacitly acknowledges the differences in interests and attitudes that exist among the communities of the Yukon with respect to the pipeline. It would be unfair to tax the residents of small communities by forcing them to finance their participation through local revenues or contributions; these communities must receive adequate financial

support from the Agency to participate in the regulatory process.

The authority to decide on the eligibility of interest groups to receive funding must reside with the Agency. This responsibility, wherever it is placed, may lead to conflict and disagreement, but it is clearly in keeping with the Agency's mandate to ensure that decisions on funding will be made locally, and by a body structured to elicit the greatest degree of participation by Yukoners. There is no perfect solution to this problem, decisions on eligibility will necessarily reflect value judgments about and choices among competing interests. However, it is likely that the Agency will exercise this function sensitively.

Funding of the Agency

The Government of Yukon, and other participants before this Inquiry, expressed the view that the Applicant should be responsible for the costs of the Agency. In Alaska, the pipeline company was required to pay for the substantial costs of both the federal and state monitoring agencies. On the one hand, it can be argued that the Agency is a necessary part of the project and, if it is agreed that the Applicant should bear all costs directly related to the project, there is no reason to make an exception here. Moreover, to the extent that the Agency must otherwise be funded by the Yukon government, it would constitute an unfair and unacceptable burden for Yukon taxpayers. The Government of Yukon presented this view to the Inquiry.

On the other hand, there are opposing arguments that seem to us, on balance, more persuasive. If the Applicant funds the Agency, the Agency's independence may be compromised both in the public's perception and in fact. The success of the Agency will depend fundamentally on its credibility in the eyes of Yukoners. There is a great risk that this credibility would be substantially damaged by a direct financial relationship between the Agency and the company that it is regulating. There should be no reason to believe that the Applicant could bring pressure to bear on the Agency through any limitation of its budget. If the Applicant financed the Agency, the public authorities would not need to review carefully the Agency's budgetary proposals, as they will, if the full cost is passed on to the taxpayer.

In this connection, the observations of the Alaska State Pipeline Coordinator are valuable. After having been

funded by the pipeline company for four years, he concluded that the savings made for the taxpayer by this arrangement were far outweighed by the inevitable compromise of independence and legislative integrity. He has written:

The Alaska Pipeline right-of-way leases for both the state and federal governments, require that the Alyeska Pipeline Service Company reimburse the costs of the State Pipeline Coordinator's office and the Alaska Pipeline office, respectively. This financial relationship between industry and government has been the subject of considerable debate since pipeline construction began. Proponents of this financing scheme have argued that government should not be required to add the manpower and expense needed for surveillance to aid industry in compliance. Industry in turn, should accept this monitoring concept as the price of doing business. Just as they accept the need to retain consultants to perform specialized tasks.

The argument has merit, but there are inherent problems with such an industry-government relationship. The reimbursement scheme of financing tends to create a necessarily close relationship between government and industry that can endanger adequate government response to the public interest, and create a loss of public confidence in the objectivity of government in executing its role.

The practice of industry payment for government efforts partially bypasses the traditional role of the Legislature in appropriating funds and insuring fiscal responsibility. Because funds do not come from direct appropriations, finance committees have tended to 'rubber stamp' agency budget requests with less than normal scrutiny.

The Trans-Alaska Pipeline experience has underscored two important reasons for returning this financing role to the public sector. By budgeting, monitoring functions through traditional legislative review and action, the danger of placing government in the uncomfortable role of serving two masters is eliminated. In addition, government's prime purpose is to serve the public interest at large. To assure that government agencies serve the public, surveillance efforts must be financed through the allocation of tax revenues for the monitoring functions (Champion, *The Trans-Alaska Pipeline: Government monitoring and the Public Interest* (1977) p. 14).

We find this reasoning persuasive, and we therefore recommend that the Applicant not be required to fund directly the costs of the Agency. This recommendation should not be taken to suggest that the Applicant should not bear significant financial responsibility for the increased government services required as a result of the project. It is limited to the conclusion that a direct financial relationship between the Applicant and the Agency should be avoided. We further recommend that responsibility for arranging funding for the Agency should rest with the federal government, and that the

Government of Yukon should not be expected to contribute towards its cost.

Location

If the regulatory process is to facilitate local participation and be sensitive to the needs of Yukoners, the Agency must have its head office in the Yukon. It would be quite unacceptable to Yukoners to have decisions that will intimately affect their daily lives made from a distance. These decisions must be taken in an environment that itself reflects the needs, goals, and aspirations of Yukoners at each stage of the regulatory process. Nor would it be acceptable to separate the technical from the social and economic functions of the Agency. It is imperative, therefore, that all of the Agency's functions be carried out in the same head office. Although certain support services, such as the review of design by computer, might be located at a distance, the senior levels of every branch of the Agency must be located in a single building in Whitehorse. The Applicant also intends to maintain the head office of the company that will build the Yukon section of the pipeline in Whitehorse and has indicated its desire to have the regulatory Agency similarly located.

small team of highly skilled experts and support staff can do a far better job than a large bureaucracy. The attention given to the construction of a northern pipeline during the past decade has created a pool of experts who are highly knowledgeable about the north and its social, economic, and physical environment. There are numerous persons in government, industry and elsewhere with the skills and experience necessary for the successful regulation of the project, and it should be possible to staff a large proportion of the Agency with personnel seconded from appropriate federal and territorial government departments. However, it may also be necessary to hire persons from outside government. Because there is likely to be competition for the services of these experts, to attract the best of them will require a flexible personnel policy.

One way to ensure a high quality staff is to engage a third-party contractor to provide the support services that the Agency will require, an approach that was highly successful in the Alaska. However, it is not at present clear how a third-party contract might be set up in Canada. An additional concern is that it may be more difficult with a third-party contractor, to engage Yukoners in the Agency staff. Nevertheless, for certain areas of expertise, the concept of a third-party contractor should be given serious consideration as perhaps the best means of assembling a highly qualified support staff.

Structure and Staff

The Agency, in addition to its senior board, will require a chief executive officer, who will be responsible for the administration of the Agency and its staff and for dealing directly with the Applicant. The relationship between this officer and the Agency should be similar to that between a corporation's chief executive officer and its board of directors. Ultimately he will be responsible to the Agency, but he must be granted sufficient discretion to act rapidly, to grant authorizations as required, subject to the terms, conditions, and stipulations agreed upon in the design stages, and to ensure that the project proceeds efficiently and expeditiously.

The importance attached to the appointment of the person who is to fill the role of chief executive officer can hardly be overstated. No matter how sophisticated the structure of the Agency, its success or failure – and the success or failure of the project – will depend largely on the quality of the senior personnel charged with regulation of the project. The principle of quality in appointments must be maintained at all levels of the Agency staff, and there is no doubt that a relatively

Access to Information

Unless interested parties have comprehensive access to information related to the design and control of the project, they cannot participate meaningfully in decisions. Also, if the project is to be understood and accepted by Yukoners, there must be a continuous and comprehensive flow of information about the project and its regulation to the communities of the Yukon.

The Alaskan experience demonstrated that failure to ensure access to available information will strain the ability of various interested groups to succeed in cooperating to regulate the project:

In the case of the Trans-Alaska pipeline project, public input through environmental organizations, while of great value, sometimes created problems unique to normal government operation. The petroleum industry by necessity considers much of the information provided to government as proprietary and thus outside the Freedom of Information Act. In Alyeska's case the use of the proprietary label was excessive but the two monitoring

agencies nevertheless were faced with the decision of what information appropriately could be conveyed to the environmental groups for their examination.

Philosophical arguments between government and industry on what information was truly proprietary strained the relations between the Agencies, the environmental groups and the industry. In the future a clear understanding of what is proprietary in both the legal and moral sense must be reached. (Champion, *The Trans-Alaska Pipeline: Government Monitoring and the Public Interest* (1977) p. 16).

Such disagreement can be avoided from the outset by agreement on the principle of comprehensive disclosure of information for all aspects of the project. Any limitations imposed on such access must be carefully defined, and they should be imposed only after there is a clear demonstration that other interests would be significantly prejudiced by disclosure. Little will be gained by secrecy as the essence of a successful regulatory process will be openness and candor.

The merits of openness have been demonstrated in the current negotiations related to the Yukon Indian land claim. The open-planning concept, agreed to by the two levels of government and the Indian groups, has been far more successful than earlier attempts to achieve solutions in secrecy. A regulatory process that lacks openness will invite mistrust and misunderstanding. Therefore, we recommend that the lesson learned from the success of the land claim negotiation be extended to the Agency's regulatory process.

To ensure that information reaches the communities throughout the period of construction of the pipeline, we recommend that the Applicant be required to appoint enough community liaison officers to inform the residents of every community in the Yukon of the project's progress, and to respond to their inquiries. Foothills has itself suggested the adoption of a similar policy, for public understanding of the project will work to its advantage, as well as meeting the needs of the communities.

The decisions of the Agency must be made continuously available to all parties participating in the Agency's regulatory and monitoring work. The Agency should be obliged to publish its decision and provide a regular flow of information about its regulation of the project. Such publication would enable all the groups and individuals involved in the regulatory process to keep abreast of the Agency's progress and to evaluate its performance.

Enforcement and Remedies

With time, energy, and goodwill, we are confident that a set of terms, conditions, and stipulations for the project acceptable to all parties can be developed, and that the Agency will be able to accomplish its mandate. Ultimately, however, the success of the Agency will rest on its capacity to enforce the obligations that it sets. The Agency will fail if it lacks the resources and the determination to demand and ensure full compliance with its obligations. Insufficient power to enforce rules has plagued the regulation of many large-scale developments, especially those in the north. The Agency must be able to engage sufficient field staff to monitor all aspects of the construction activity, for it cannot rely solely on information supplied by the Applicant to ensure full compliance with the terms, conditions, and stipulations governing the project. The Agency must have its own personnel in the field at all times to review and evaluate the evidence of compliance that the Applicant provides. A team of inspectors should report to the Agency's chief executive officer the evidence they have obtained in the field, and they should identify any shortcomings in the Applicant's implementation of the Agency's terms and conditions. They should also have the discretion, subject to review by the chief executive officer, to grant waivers of terms and conditions when circumstances warrant such action. This blend of regulatory authority and discretion must be present at each construction site.

The Agency's monitoring and enforcement effort should be supplemented by full reports from the Applicant regarding the implementation of the Agency's terms and conditions, or authorized variations of them, and of any design changes.

The grant issued to the Applicant for the right-of-way should make clear that the Applicant must be able to demonstrate the acceptability of all activities undertaken by the company. Contractors and individuals associated with the project should be liable to prosecution for violations of the Agency's terms. The Applicant must be required to demonstrate the acceptability of each activity before it proceeds with it, and not on the understanding that the necessary information will be filed at a later date.

A major problem in any large construction project is to find the means of forcing the contractor to comply with job specifications. The power to shut down a project for violations can be authorized, but it is rarely used because it accomplishes little and may cause more problems than it solves. Shut-downs should be

regarded as enforcement failures. A range of realistic measures must be developed for cases in which, by accident, neglect, or a willful act by the Applicant, its contractors, or any individuals, situations arise that violate or threaten to violate the terms and conditions, acts, regulations, or ordinances related to construction of the pipeline. The penalties must be substantial enough, and the threat of prosecution must be real enough, to create a meaningful financial disincentive for any violation. There is a dismaying history of small penalties being imposed for the violation of statutes protecting the northern environment. Continuation of this unfortunate history would fatally undermine the authority of the Agency. With regard to offences, it will be necessary to have a prosecutor's office that is sufficiently specialized and has the resources to ensure rapid and fair enforcement. The government must therefore ensure that the Crown Prosecutor based in Whitehorse has the resources and the authority to be able to prosecute all violations of the Agency's terms and conditions.

To augment the monitoring and enforcement efforts of the Agency, private individuals and interest groups must be permitted to report on situations in which they believe that the Applicant, or one of its contractors, is in violation of its obligations, and they must be assured that such charges will be investigated. The Agency will not be able to maintain a field staff large enough to monitor all aspects of the project at all times, but often private citizens will be in a position to observe the actions of the Applicant and its contractors, and the Agency should be receptive to information provided by the public.

Appeals

Although the thrust of our recommendations has been to place comprehensive authority for regulation of the project with the Agency in the Yukon, we recognize that to maintain public and political accountability and to provide the means of infusing national and international interests into the regulatory decisions, there must be some provision for review of the Agency's decisions. Such review must be exercised openly and sparingly, if the regulatory process is to maintain its integrity and credibility. Any system of review that does not permit open representations and the articulation of reasons for decisions would fatally undermine the Agency's ability to maintain the confidence of the interested parties and of Yukoners generally. We recommend therefore that the legislation

that creates the Agency should provide for appeal to, or review by, the Northern Pipeline Commissioner or his successor. The Commissioner should be responsible to a committee of cabinet members that represents the departments most involved in the pipeline project.

The Agency's decisions must balance the whole range of interests and departmental considerations that will be in a position to influence all aspects of the project, and for this reason a single Agency has been recommended. It would, therefore, run contrary to the idea of a comprehensive and integrated regulatory authority to allow an appeal to, or review by, individual Ministers and we are therefore rejecting such a procedure. Nor should the right of appeal or review be limited to the Applicant. It must be available to all interested parties involved in the regulatory process.

Timing

Timing is as crucial to the regulatory process as is its structure. In Alaska, for example, the regulatory system began to operate only at the stage of final design review to ensure compliance with the terms and conditions and to respond to impact assessment in the field. With respect to the social and economic impacts, to the extent that the system operated, it operated only as a response to proven grievances. The Alaskan and other experiences make it clear that it is imperative that the Agency be created immediately following the grant of approval-in-principle of a pipeline corridor across the southern Yukon. Any delay in the creation of the Agency will require a corresponding delay in the beginning of the construction of the project.

The success of regulating the construction of the pipeline will depend on the preparation for it. There must be a preliminary design phase that begins early and is continuous and flexible. This stage must precede the letting of contracts for materials and labour, so that the contracts may incorporate the conclusions reached during this stage. Before pipeline construction begins, the planning and design phases of the regulatory process must be complete, and the public must be prepared for the impact of construction. Delay in the creation of the Agency and its initiation of preliminary planning will mean that the Agency will be unable to anticipate problems, and will be forced to react in negative ways to problems of regulation. Only by providing sufficient lead time, will the Agency be able to regulate the construction work positively and to

anticipate problems and devise solutions that can be incorporated in the project's design.

Throughout our discussion of appropriate regulatory structures, we have not lost sight of the Agency's responsibility for maintaining the integrity of the pipeline project and for completing it on schedule. The pressures that will be brought to bear on the Agency, once construction is under way, when delays become extremely costly, must not be underestimated. Because of this unenviable situation, it seems wise to go to substantial trouble to transfer regulatory issues to the Agency at an early stage so that it may begin to resolve disputes and conflicts as soon as possible.

In discussing participation by interested parties, we stressed the fact that participation can be meaningful only if there is sufficient time to hear from the parties and to consider their submissions. To expect a process of formal public review, with public hearings on all decisions, during the actual construction phase is unrealistic, because it would leave no time to consider changes or options without interfering unduly with the completion of the project. It is, therefore, important

that the Agency be structured, and its schedule organized, so that these processes are completed before construction itself exerts the pressure of urgency.

Not only is the timing of the establishment of the Agency of critical importance, it is also important to design the Agency so that its authority will be terminated as soon as possible. We argued above that one of the major social impacts of the pipeline project will be the impact of the regulatory structure upon the normal functions of regional institutions and its interference with life in the Yukon. Therefore, to limit the prejudice to regional institutions, and to limit, as far as possible, the loss of autonomy that will be felt in the Yukon, the Agency's mandate should expire reasonably soon after gas begins to flow through the pipeline. There will be a number of activities that will have to be completed and monitored after gas begins to flow through the line, but these responsibilities can be assigned to other federal and regional institutions and agencies. The regulatory task at that point will no longer be so massive as to justify the continued intrusion that the Agency will have created on normal processes of government.

11 Compensation



Board members, left to right, Edith Bohmer, Chairman Ken Lysyk and Willard Phelps listen to Burwash Landing residents (Whitehorse Star)

Charles Eikland testifies at Destruction Bay (Yukon Indian News)

Board chairman Ken Lysyk converses with Father Henk Huybers, Burwash Landing (Whitehorse Star)

Legislative Assembly member Hilda Watson listens to comments of Haines Junction residents (Yukon Indian News)

David Morrison, left, representing the Whitehorse Chamber of Commerce; Margaret Thompson, centre, national Native Women's Association of Canada and David Joe, counsel for the Council for Yukon Indians at formal hearings in Whitehorse (Whitehorse Star)



Introduction

Having studied the probable social and economic impacts of the proposed pipeline, the Board has concluded that, on balance, the project will have a substantial negative impact on life in the Yukon. Although the implementation of a wide range of regulatory measures should keep the negative impact within acceptable limits, the majority of the benefits of this project will accumulate south of the 60th parallel, whereas all of its burdens will be borne by the Yukon and its people. As necessary as planning and regulation is to limit the project's adverse affects, they will not, by themselves, be sufficient to compensate Yukoners for losses arising from the construction of the pipeline, nor can they adequately redress the imbalance of burdens and benefits.

The Board proposes that a more equitable distribution of burdens and benefits be achieved by compensating Yukoners through a Yukon Heritage Fund. This fund would support projects and programs designed to improve various aspects of the quality of life for the people of the Yukon.

Briefly, the Heritage Fund is a recognition of two things. First, despite every effort to minimize the adverse impact of the project, there will still be a substantial negative impact on the quality of life, and on the natural environment of the Yukon. Secondly, the Yukon is being asked to provide the assets of its location, and its social and administrative infrastructure, to a project from which it will not benefit in any substantial way. The Board has concluded, therefore, that the Yukon and its people ought to be compensated for these unquantifiable – but very real – detrimental effects. All possible steps must – and will – be taken to minimize the negative aspects of the project by regulatory measures and responsive government programs, but the Yukon must be given substantial financial resources to support projects and programs that will assist Yukoners and confer benefits on them. These projects may, perhaps, be completely unrelated to the pipeline project itself and designed, not as a response to any specific impact, but to improve aspects of the quality of life in the Yukon.

Not only are the benefits to Yukoners of the proposed pipeline relatively limited, they are also primarily short-term. What Yukoners require, as compensation for accepting the project, are not merely these short-term benefits, but the means to ensure that they will gain from the project in the long run. The negative impact of the project will not be limited to its period of construction; it will continue for many years afterward.

The terms and conditions under which this project may be permitted to proceed must ensure that benefits to Yukoners will endure at least as long.

Beyond Regulation

In this report, the Board has recommended or suggested various measures to guarantee that some tangible benefits, such as employment opportunities, will be made available to Yukoners. However, the extent to which the redistribution of benefits can be achieved through regulatory measures is limited. Modification of the project itself to maximize benefits in the Yukon could become counterproductive after a point, because the project might become much less profitable, while offering only slight further benefits to Yukoners. The Agency, described in Chapter 10, will ensure that Yukoners receive the benefits that can be achieved through reasonable modification of the project and the imposition of certain obligations on the Applicant.

It is important to distinguish the purpose of the Heritage Fund both from compensation to individuals for damage suffered, and from the increased revenues to government that will finance expanded or new services in response to the pipeline. Foothills has assumed liability for direct damage done to individuals, and has suggested that an accessible and expeditious process of providing compensation to them should be developed. In Chapter 6, we have made some recommendations on this subject. However, it is important to recognize the limits of compensation to individuals. Compensation for damages to the individual cannot be extended to generalized claims for compensation for damage to the social fabric of the Yukon. Compensation to the individual is, by its nature, limited to forms of damage that can be quantified. To limit compensation to Yukoners to losses that can be quantified fails to acknowledge a much greater loss – the impairment of the quality of a special way of life. This loss cannot be assessed in financial terms.

The Heritage Fund will be quite separate from the resources needed for the mitigation, minimization, or avoidance of specific social and economic impacts. Each level of government will require funds to support its efforts to keep the negative impact of the project to a minimum. We have discussed this topic in Chapter 6, which deals with government revenues and expenses and appropriate levels of taxation. The programs of the various levels of government do not represent payment to Yukoners for the unquantifiable losses they will

suffer as a result of the project; these programs merely help to limit the damage of the project to the Yukon, not to improve the quality of life there.

It is because compensation to individuals and increased government programs will not adequately compensate Yukoners for the unwelcome changes this project will bring to them that we recommend the creation of the Yukon Heritage Fund. The fund offers the possibility of going beyond simple responses to the negative impact of the pipeline project. It will support positive steps that Yukoners, on their own initiative, will want to take to restore, maintain, and enhance the quality of life in the Yukon.

The Yukon Heritage Fund

We have explained why we think Foothills should capitalize the proposed Heritage Fund for the benefit of all Yukoners, but some elaboration of each of these points may be useful.

The impact of the proposed pipeline on life in the Yukon will be massive. During construction of the pipeline, there must be a highly centralized regulatory authority that will, of itself, impose unwelcome restrictions on the freedom of Yukoners. The focus of the regulatory authority will, of course, be centred on the project, not on the aspirations of Yukoners. But the project and the regulation of it will require a re-ordering by Yukoners of many priorities, and the devotion of various services and goods to the pipeline for the duration of its construction. The energies devoted to the pipeline cannot be recaptured or restored; the time that Yukoners must spend responding to the project and its impact is time forever lost to them. The project will seriously interrupt a way of life that is based on harmony with the environment and a pace of life that is determined by the seasons, not by the pressing demands of a huge economic development. The population and the political base of the Yukon will be irrevocably changed by this project. Its social and economic impacts will not end with construction; they will linger on.

Yukoners are also being asked to bear certain risks. The United States Federal Power Commission, in its *Recommendations to the President*, spoke of compensating the various parties for bearing the risks of financing and building the pipeline. The commission pointed out the risk of not completing the project, the risk that the project may prove to be uneconomic, and the risk of interruption to service. Each of these risks

must, of course, also be borne by Yukoners. If the project is not completed or if it becomes uneconomic because of cost overruns, it would not only be the financiers who bear the loss; an incomplete or an uneconomic project would leave Yukoners with the burdens already described and even fewer benefits.

Furthermore, the Federal Power Commission failed to state what is perhaps the greatest risk of all. Although the Board has concluded that the negative impact of the proposed pipeline can be kept within acceptable limits, we cannot be sure of the exact limits of that impact. It is the Yukoners who must bear the risk that this impact has been underestimated, and it is the Yukoners who must bear the damage to their way of life and to their environment from any underestimation of the impact. Indeed, it is reasonable to argue that the persons who bear the greatest risks in this project are those who are being asked to put their way of life on the line, not just their money. There can be no doubt that the people of the Yukon should be compensated for their risks on exactly the same principle as those bearing other forms of risk.

Yukoners are being asked to offer the geographical location of the Yukon to a project from which they will derive few benefits. We know that different areas derive benefits from different forms of natural riches. For example, jurisdictions that have substantial mineral or petroleum reserves derive important financial benefits and royalties from these resources, and no one would question this right. Geographical location may equally be regarded as a natural endowment and, indeed, geographical location in the form of canals or harbours is recognized as a proper source of revenue. Commissioner Pearson alluded to this principle in his testimony.

The concept is there that we're providing the overland link to get Alaskan gas out to the U.S. consumers, and it is not our gas, so it's pretty tough to share in that, but there are the lands, the Yukon, that are being used and it is development, it is resource development so there's a concept there of resource development indeed (45-6080).

Not only are Yukoners being asked for the advantage of their geographical location, but also for the use of their infrastructure of roads, services, and communities. Heavy demands on this infrastructure will work to the detriment of the people of the Yukon, and again compensation is due to them for such damage.

The Yukon, in being asked to provide a transportation corridor for Alaskan gas, is not being asked to participate in any other meaningful way in the project. In many jurisdictions, a pipeline is likely to be accompanied by some form of economic production,

secondary industrial developments, or substantial benefits to the local consumers. None of these benefits will be available to the Yukon and its people, and they must, therefore, rely on the pipeline project itself for compensation.

If this project proceeds, approval of it will have been prompted, not by the interests of Yukoners, but by the national interest. The project will deny Yukoners the freedom to determine their own destiny, because the new directions that will inevitably accompany the project will be dictated by the national interest.

There is common agreement that the Yukon has one of the most magnificent natural environments in the world, and it is with understandable concern that Yukoners contemplate a massive project such as a pipeline that must inevitably exploit and scar a part of their land. Unfortunately, even with the best of controls, regulations, and planning, there will be some irreversible damage to the environment, and Yukoners must be compensated for this loss, too. Although others will be reporting on the environmental impacts of the proposed pipeline, it is clear to us that any damage to the natural beauty of the Yukon will be a substantial loss to its people.

The National Energy Board in its report has suggested that consideration should be given to the provision of special funding for northern communities that are adversely affected by the project in both the short-term and the long-term (p. 5-226). This suggestion recognizes the short-term nature of any benefits that are likely to be derived from the construction of a pipeline. The creation of the Heritage Fund, which will provide benefits to Yukoners for a generation or more, seems to us the most suitable way of providing long-term, tangible benefits to the people of the Yukon.

Objectives

The Heritage Fund, supplemented by the interest that it will generate, can be used to preserve the historical legacy, to foster the richness of cultural diversity, to protect the natural assets, and to create new opportunities for the residents of the Yukon.

It would be premature and inappropriate for us to make detailed recommendations for the expenditure of income from the Heritage Fund. These questions should be answered by Yukoners as a whole, not by us. The Board, therefore, recommends that the Commissioner be instructed to appoint, subject to consultation, a broad-based, non-partisan working

group, which should begin immediately to develop terms of reference for the fund. This working group should report to the Commissioner as soon as possible. After the Commissioner has approved the terms of reference, he should forward them for review and approval by the legislative assembly.

Without in any way detracting from the principle that the Heritage Fund should be used for the benefit of all Yukoners, the Board wishes to urge the working group to give serious attention to the manner in which funds should be allocated to different communities. In the near future, there is likely to be considerable variation among the communities in the degree of impact felt during the construction of the pipeline, and it may be desirable to weight the allocation of funds in favour of the communities that suffer the most.

In Chapter 7, we explained why it is not possible to assess with any certainty the varying impacts of the pipeline on different communities, and it would, therefore, be premature for us to make any specific recommendations in this regard. However, after a thorough study by the working group, we are confident that it will be possible to develop terms of reference responsive to the needs of all Yukoners.

In Chapter 7, we discussed one activity, which the Board believes would be consistent with the objectives of the Heritage Fund. This is the establishment of a Yukon Impact Information Centre. This centre must be fully independent in all respects, including funding. Because the purpose of the centre is to assess the impact of the pipeline on the quality of life in the Yukon, the information it collects will, no doubt, be useful to the Heritage Fund in developing its own programs and projects.

Structure

The Heritage Fund should act as a force to unite Yukoners. Accordingly, its structure, board, and methods of distributing income must be organized to ensure that all interested parties are equitably represented to accommodate diverse interests, and to bring them together for the common good of all Yukoners.

The income from the Heritage Fund should be used in two complementary ways: for projects and programs designed to benefit the Yukon as a whole, and for projects and programs designed to benefit individual communities. We therefore recommend that the fund be structured on a two-level, parallel basis to reflect

these two levels of activity and to permit decision-making at both levels. Membership at both levels should be broad-based and non-partisan, with representation drawn from all levels and all interest groups in the Yukon.

At the first level of organization, a board of directors should be responsible for two functions: to disburse a portion of the income of the fund, the amount of which will be determined from time to time, to communities of the Yukon to redistribute to their own projects; and to spend the fund's remaining income on projects designed to benefit the Yukon as a whole. Members should be appointed to the board by the Commissioner on the advice of the legislative assembly, after extensive consultation with representatives from the various interest groups and communities in the Yukon.

At the second level of organization, there should be a series of decentralized boards, one for each community in the Yukon, the membership of which should be drawn from and appointed by the individual community. The boards at this level would be responsible for initiating projects, and for receiving and evaluating proposals for projects within their jurisdiction. These decentralized boards should be subject to as few restrictions as possible with respect to the types of projects funded so that each community may devise projects and programs that, in the view of its residents, will serve its own interests. It is crucial, therefore, that the membership of these boards reflect the different interests of the community. Without wishing to interfere unduly in this matter, we think it is important to recommend that, in communities that have substantial populations of both Whites and Indians, such as Teslin and Carcross, the board should have an equal number of Whites and Indians on it. In communities with substantial Indian and White populations, the projects funded at the local level must either serve the whole community, or there should be proportionate funding on the basis of population for the projects of each group.

The precise structure of the administration of the Heritage Fund, the mechanisms that may be developed to operate and maintain it, and the means by which it selects its members are clearly matters for Yukoners themselves to decide, once the concept of the fund is accepted and its revenues and budget ascertained. In this regard, the Board wishes to recommend only that the working group described above be instructed to address these issues in its investigations.

Finally, the Board suggests that some provision be made to accommodate new communities within the scope of the fund, whether or not they are established because of the pipeline.

Funding

The Heritage Fund will require generous initial capitalization, followed by increments derived from a portion of the annual property tax revenues charged against the operating pipeline. We recommend that the initial capitalization consist of \$200 million, and that it be paid by Foothills. The Board recognizes that to require Foothills to provide the full \$200 million immediately following approval-in-principle of a pipeline across the southern Yukon would cause Foothills some difficulty. Yet it is essential that Yukoners have immediate access to substantial funds to plan and initiate projects and programs that will be in operation by the time the impact of the pipeline project begins to be felt. To meet the needs both of the people of the Yukon and of Foothills, the Board recommends that Foothills be obliged to pay the capital sum of \$200 million in installments of \$25 million each year for eight years, with the first payment to be made immediately upon its receiving the approval-in-principle of the corridor. As recommended in Chapter 6, the Heritage Fund should also receive 50 per cent of the annual property tax revenues derived from the pipeline, beginning in the year that gas first flows through the line. These annual increments to the fund should be considered the equivalent of royalties paid on a production basis for other forms of resource development. The fund should enjoy tax-exempt status.

We recognize there is a danger of asking too much of a private enterprise in return for permission to undertake an economic development of this nature. Throughout this report, we have tried to be both reasonable and realistic in suggesting the liabilities that should be borne by the Applicant. We have not assigned liability to the Applicant for every undesirable consequence of the project. For example, we have not suggested that the Applicant should assist persons on fixed incomes, who will be hurt by the inflation that the project will induce. We have argued that this is properly the government's responsibility and should be met, if necessary, through increased tax revenues. Similarly, we have not tried to make the Applicant responsible for the improvements that will be necessary in the social welfare services of the Yukon. Again, these expenses should be met by tax revenues. Furthermore, we have not suggested that Foothills be required to provide equity in the pipeline company to Yukoners at advantageous prices, although that is a proposal that has been put before us. We believe that Foothills should permit Yukoners to participate in the financing of the project, but we do not think that Foothills should be required to make this participation available on

terms different from those available to others who participate in the financing of the project.

We also agree with the National Energy Board's conclusion that Foothills must know in advance what will be its liability for indirect social and economic impacts. Foothills should, at the outset of the project, have a clear understanding of its responsibilities with regard to the level of property taxes, and of its obligations to compensate individuals for damage done to them. This same requirement was basic to our formulation of the appropriate means of compensating Yukoners for the adverse impact of the project, and it has led us to the recommendation that the Heritage Fund should be created for Yukoners, and funded by the Applicant.

The Board views the \$200-million figure for capitalizing the Heritage Fund as reasonable, although we recognize that, whatever figure is chosen, some will consider it to be too low, others too high. It is also evident that, having established the Heritage Fund as a form of compensation for unquantifiable damage and losses, there may appear to be some contradiction in fixing a specific sum as an appropriate level of compensation. However, if we failed to name a figure, we should leave the losses both unquantified and uncompensated.

The Board does not wish to suggest that money by itself can recompense Yukoners for what they are being asked to sacrifice. No amount of money can fully compensate Yukoners for the damage to their way of life, their sense of freedom, and their magnificent environment. Yukoners are faced with a situation that is not of their own making, with a decision that is not theirs to make. The national interest may dictate that these burdens must be borne by Yukoners, despite the fact that they cannot be compensated for these burdens. That being the case, there is no alternative to a second-best solution, the provision of financial compensation. There is no other remedy available.

The Treaty

Some have suggested that the Transit Pipeline Treaty between Canada and the United States, which was signed (but has not yet been ratified) by both nations in January 1977, may restrict the range of financial compensation that might be paid to the Yukon. Advice has been provided to the Inquiry on this question, and we have concluded that our recommendations with regard to the Heritage Fund, and the levels of property

taxation of the pipeline are in keeping with both the terms and the spirit of the treaty. However, if, after receiving further advice, the government concludes that any of our recommendations in this area could possibly be in violation of the terms of the treaty, we recommend that ratification of the treaty be postponed until clarification is obtained and, if necessary, an appropriate protocol to the treaty negotiated.

Equity Participation

Although the issue of equity participation in the financing of the pipeline is not directly a question of compensation, we think it can be usefully discussed in this context. Foothills has proposed to give residents of the Yukon an opportunity to purchase equity ownership in Foothills (Yukon) on attractive terms. This does not mean that Yukoners may purchase shares at a discount price or that they will be given shares. Rather, Foothills proposes that a portion of the first offering of the equity shares in Foothills (Yukon) be reserved for Yukoners. Experience with first offerings of other pipelines, particularly of those in Alberta, has shown that they are often a very good investment. Some Yukoners have expressed a strong desire to participate in the financing of the pipeline by this means.

It must be recognized that this project is not risk-free. As stated above, the United States Federal Power Commission suggested that the project might be uneconomic, not completed, or that service may be interrupted. Should any of these situations materialize, the value of an investment in Foothills will fall short of expectations.

The Board recommends that Foothills' proposal be instituted, and that Foothills be required to make available sufficient shares in the first offering of equity in the financing of the pipeline to meet the demands of all Yukoners who wish to participate. In addition, if the board of directors of the Heritage Fund, after seeking financial advice, concludes that investing a portion of the Heritage Fund's capital in the pipeline project would be an advantageous investment, then Foothills should be required to reserve sufficient additional shares for this purpose.

As a general matter, there should be no restrictions placed on the transferability of the shares purchased by Yukoners. Such restrictions would be appropriate only if the shares were being offered at a preferential rate. In a situation such as this, the only preference given is the right to participate in a portion of the first

offering; there is, therefore, no justification for restricting transferability.

The representatives of the Government of Yukon indicated in their testimony that they wished the Yukon government to participate in the equity ownership of the pipeline. They indicated that they preferred this form of benefit to increased tax revenues from the pipeline. However, as discussed above in Chapter 6, the preference expressed appears to have been, at least to some extent, a reflection of a government's concern that the only effect of increasing tax revenues would be to reduce the operating grant from the federal government, and that made equity ownership more attractive as a means by which benefits of the pipeline could be retained in the Yukon. A number of the Board's recommendations are direct responses to the need to maintain substantial benefits from the pipeline in the Yukon. The acceptance and implementation of these recommendations would alter the situation that the Government of Yukon perceived and retain substantial revenues in the Yukon. In that

case, we recommend that the Government of Yukon not participate in the equity ownership of the pipeline because it seems inappropriate for a government that will have a significant regulatory responsibility over the project to be also a potential participant in the equity ownership of the pipeline. This concern for conflict of interest need not be extended to the Heritage Fund, which is designed to be independent of the Government of Yukon, and which can be treated for investment purposes as a private investor.

One further aspect of equity participation is the membership of Yukoners on the board of directors of the company that will build the Yukon portion of the pipeline. Such participation could have considerable importance as one further means by which Yukoners may be sure that they have some say in the management and control of the pipeline project. The Board therefore recommends that Foothills (Yukon) be urged to nominate to its board of directors a number of the Yukon residents to provide the company with the advice and sensitivity of Yukoners at all stages of its operation.

Appendices

Appendix A Terms of Reference

1. The Board of Inquiry shall be composed of:

- (a) A Chairman appointed by the Minister of Indian and Northern Affairs.
- (b) One member nominated by the Yukon Territorial Council.
- (c) One member nominated by the Council for Yukon Indians.

2. The Board of Inquiry shall prepare and submit to the Minister of Indian and Northern Affairs a preliminary socio-economic impact statement concerning the construction and operation of the proposed Alaska Highway gas pipeline. This statement should identify:

- (a) the principal socio-economic implications of the Alaska Highway Pipeline *proposal*;
- (b) the attitude to the proposal of the inhabitants of the region it would affect;
- (c) possible deficiencies in the application of the proponent;
- (d) possible courses of action that might be taken to meet the major concerns which are identified and to correct any major deficiencies in the application.

3. To this end, the Inquiry shall:

- (a) Ensure, with the co-operation of the proponent, that information concerning the proposed pipeline is made available to Yukon communities.
- (b) Seek the views of interested communities, individuals, and organizations within the Yukon.
- (c) Hold public hearings in the Yukon to receive submissions and to facilitate the provision of information in response to questions raised before the inquiry.
- (d) Review the application for construction of the pipeline, in order to identify:
 - (i) areas in which additional information should be provided by the proponent; and
 - (ii) further studies that may be required.

(e) Advise the Minister of Indian and Northern Affairs of the measures that should be taken, including arrangements for a further inquiry, to produce a final socio-economic impact statement upon which specific terms and conditions could be developed for the construction and operation of the pipeline in the event that the Alaska Highway application receives approval in principle.

4. The Government of Canada shall provide the inquiry with funds with which it may:

- (a) Engage staff and use for other purposes to assist Inquiry members in the review and assessment of the application, in the public hearings, and in the drafting of the preliminary socio-economic impact statement.
- (b) Assist in the preparation of briefs and submissions by such groups as the Inquiry considers could usefully contribute to the preparation of the impact statement.

5. A member of the Environmental Assessment and Review-Panel established by the Minister of the Environment will be present at the public hearings held by the Inquiry and will draw the attention of the Environmental Panel to any environmental matters that may be raised in those hearings.

6. The Inquiry shall adopt such methods and procedures as from time to time it may consider appropriate.

7. The Chairman shall be responsible for the effective functioning of the Inquiry, including:

- (a) the engagement, direction, and discharge of such accountants, engineers, technical advisors, clerks, reporters, and other assistants as he deems necessary, including the services of counsel, to aid and assist in the Inquiry;
- (b) the rental of offices and hearing rooms;
- (c) the management of funds provided to the Inquiry, on terms and conditions to be approved by the Treasury Board.

8. The Inquiry shall submit its report and the preliminary socio-economic impact statement to the Minister of Indian and Northern Affairs by August 1. Minority or supplementary reports may be submitted by any member of the Board who wishes to do so.

Appendix B Community Profiles

The Inquiry travelled to 17 communities throughout the Yukon during the course of its hearings this summer. Their locations are shown in Figure 1 in Chapter 1 of this report. Below are offered brief profiles of each community that the Inquiry visited. The terms unorganized community, local improvement district, and city have been used in the profiles. They are descriptions of the administrative status of the communities. A city in the Yukon, as elsewhere in Canada, has independent control in many areas of administration and it can, of its own volition, initiate a variety of projects. It receives funds from the Government of Yukon and, within certain limits, it is free to use these funds as it will. A city may, for example, decide to build a recreation centre on its own initiative and with its own funds.

Under the Local Improvement District Ordinance, an elected board of trustees administers the operation and maintenance of community services and recommends to the Government of Yukon the capital requirements that are needed for such services. The district is a designated area, with clearly delineated boundaries and, through this mechanism, the people living within it play a larger role in determining its affairs.

An unorganized community has no official political structure, and its funds and services are managed from Whitehorse by the Yukon government or the federal government.

The three main Indian organizations in the Yukon are the Council for Yukon Indians, the Yukon Native Brotherhood, and the Yukon Association of Non-Status Indians. They actively participated in the hearings held in each of the communities visited by the Board. These organizations generally have a representative living in each community, with other representatives visiting from time to time.

Beaver Creek

Beaver Creek, Canada's most westerly community, is located at Mile 1202 on the Alaska Highway, roughly 21 miles from the Alaska border. The area was first prospected between 1909 and 1914 by a group of men who later discovered the rich gold fields of Chisana,

just across the Alaska border. Beaver Creek was used as a supply route between White River and the Chisana diggings, but the existence of the settlement, in any permanent sense, is due to the Alaska Highway. It was established around 1950 as a Canada Customs and Immigration checkpoint; it is the last community in Canada before reaching the Alaska border by the Alaska Highway.

Current Population

Beaver Creek is designated as an unorganized community. It has a present population of just over 100, of which approximately 80 per cent are White. The settlement depends on the Alaska Highway for its existence, serving not only as a checkpoint for Canada Customs and Immigration, but also as a highway maintenance centre and a service centre for travellers. The town's economic base, is, therefore, seasonal. It depends on the flow of tourists through it and requires a supplementary labour force between May and September. The population has grown slowly but steadily since 1950, and it will probably continue to increase, as tourism grows, owing to the increasing popularity of the Kluane area as a tourist attraction. The settlement has features in common with other communities on the highway. Its transport-oriented services line both sides of the highway, and the residential area lies farther back from it. The Customs and Immigration checkpoint is in the middle of town, directly on the Alaska Highway. Strangers driving vehicles from one part of town to another must stop at the checkpoint.

Services and Facilities

Beaver Creek has an elementary school for grades one to eight, and it can accommodate up to 25 students. Students attending high school must go to Haines Junction, Whitehorse or Dawson City.

There is a nursing station, but the public health nurse visits the town only once a week from Destruction Bay, approximately 119 miles to the southeast by the Alaska Highway. A doctor visits Beaver Creek once a month on his regular tour of the highway communities. A dentist visits once or twice a year.

The settlement has a recreation centre, with a community hall, curling rink, and an indoor swimming pool, which is, however, used only in the summer. A rifle range is being built, library books are sent out every three months from Whitehorse, in exchange for the books sent out three months earlier.

One RCMP officer is based in Beaver Creek, and he also serves Burwash Landing and Destruction Bay. At

Beaver Creek, his main duties are related to the Customs and Immigration office. Bus service is available between Whitehorse and Beaver Creek, and between Beaver Creek and Fairbanks. There is a gravel airstrip approximately one and one-half miles north of the community.

Beaver Creek receives CBC radio, but the town must pay \$1,000 a year to receive CBC-TV. There are approximately 50 telephones in town. At present, there is no post office at Beaver Creek, a situation that its residents are anxious to remedy.

Burwash Landing

This settlement is at Mile 1093 of the Alaska Highway, approximately 177 miles northwest of Whitehorse. In 1904, the Jacquot brothers, two men who had come to the Yukon from France during the gold rush, built a trading post on the shore of Kluane Lake. The site was a particularly good landing point for river craft, and the area was good for hunting, fishing, and trapping. The post was named after Lauchlin Burwash, a government mining recorder at Silver City. The Jacquots built cabins for the use of persons who came regularly to their trading post and thus the settlement gradually grew. With construction of the Alaska Highway in 1942, more families moved to Burwash Landing from surrounding areas. Until then, the settlement was relatively isolated, trails to Carmacks and Whitehorse being the only overland connection. In 1965, the government built about 15 wooden houses for the Indians there.

Current Population

The present population of Burwash Landing is about 65, of which a large percentage are under 25 and of Indian ancestry. There are about 20 wooden houses in the town, without plumbing or sewage facilities, and nearly all of them are occupied at present. Burwash Landing is an unorganized community. Water is taken from wells or the lake, and a communal washroom has recently been built. All homes use wood for heating, but a few of the other buildings use fuel oil. There is a small store run by the Indian Band, and there is a larger store in nearby Destruction Bay. A substantial portion of the food consumed by the inhabitants is taken from the bush. The Indian Band office is the centre of the community, and it runs various recreational and community-oriented programs. Other facilities include a Roman Catholic mission, a tourist

lodge (27 units), a museum for tourists, a gas station on the highway, and an outfitter.

Services and Facilities

There is no school in Burwash Landing; students in grades one to eight must travel the ten miles to school in Destruction Bay; high school students go to Whitehorse, Haines Junction, or Dawson. The BLADE program (a new curriculum designed to teach life skills) is offered in the community hall. A public health nurse runs a health clinic, and a doctor visits from Whitehorse once a month.

The RCMP officer at Beaver Creek (107 miles to the northwest by the highway) offers the only police surveillance of protection in the area. Situated right on the Alaska Highway, Burwash Landing has bus service. There is an airstrip, but no scheduled flights. CBC radio is available. The cost of CBC-TV, \$1,000 per year, is shared by Destruction Bay and Burwash Landing. There are five telephones, but no post office. Mail is delivered twice weekly.

Carcross

Carcross is located at the north end of Lake Bennett, about 45 miles south of Whitehorse. The Tagish Indians, the first people to live in this area, centred their activities near the mouth of Tagish River. They camped near present-day Carcross when they were in that area because caribou crossed at the narrows between the lakes. The name Carcross is an abbreviation of "caribou crossing." There was no permanent White settlement at Carcross until the gold rush of 1898. The two main routes of entry into the Yukon, across Chilkoot Pass and White Pass, led to the south end of Lake Bennett. In 1899, the White Pass and Yukon Railway reached Carcross and, in 1900, it was extended to Whitehorse. Carcross remained the distribution point for the mining area centred on Conrad City, a town on Windy Arm of Tagish Lake, which prospered during the first decade of the 20th century. After the Conrad mine closed, the continued existence of Carcross has depended on the railway. In 1901, a residential school was established there that Indians from all over the territory attended. It closed in the 1960s, but was reopened in 1972 as the Carcross Community Education Centre. At various times, Carcross has served other mining developments, such as the Arctic and Venus mines, both of which closed in the late 1960s. The settlement's position on the Alaska Highway south of Whitehorse, and the imminent opening of the Carcross-Skagway Highway, should continue to ensure its survival as a tourist centre.

Current Population

The population of Carcross has remained relatively stable since the early 1900s and it is now around 250, about 50 per cent of which is of Indian ancestry. It is an unorganized community. There is a distinct Indian village on the south side of the narrows, but Indian families also live throughout the settlement. Many of the houses in the Indian village have been derelict for years, the occupants having moved into the main part of town. The proximity of Carcross to Whitehorse leads to a dependence of sorts on Whitehorse for recreation, shopping, and other resources. Many Carcross residents travel to Whitehorse regularly both by road and by rail. Carcross residents depend in varying degrees on hunting and trapping to supplement their diet.

Services and Facilities

A public school teaches grades one to six, but students in grades seven to twelve are bussed daily into Whitehorse. Just outside of Carcross, there is a cooperative community school for students who have problems fitting into a regular educational structure, or who seek an alternative approach to learning. It attracts students from all parts of Canada, but no local students attend it.

There is no year-round nurse in attendance at the nursing station, but the owner of the general store substitutes when necessary. A medical doctor visits from Whitehorse once a month, a public health nurse from Teslin also visits monthly, and a dentist visits two or three times a year. CBC and CKRW radio programs are received from Whitehorse. A local cinema was discontinued with the advent of CBC-TV, for which Carcross must pay \$1,000 a year. There is a community hall and Indian Band hall, curling club, baseball diamond, book deposit station, and an indoor swimming pool for summer use. The beach at Carcross is a popular summer tourist and recreation area. One RCMP constable is stationed in Carcross.

In addition to its highway connections, including the Carcross-Skagway Highway, soon to be opened, there are also daily trains to Whitehorse. There is a short gravel airstrip, but no scheduled flights. There are about 53 telephones in town and a post office. Mail is delivered three times a week.

Carmacks

Carmacks is located at Mile 103 on the Klondike Highway, where it meets the Robert Campbell Highway,

about 110 miles north of Whitehorse. Years before Carmacks became a permanent settlement, it was the home of a few Indian families who lived on the trading route used by Chilkats from the North Pacific coast and Athapaskan Indians from the interior. It was also a caribou-crossing site. The location was a resting place for boats and for stage coaches making the two-week trip between Whitehorse and Dawson. A camp to supply wood grew up, and local timber was used to build river boats.

The settlement of Little Salmon, now abandoned, was situated due east of Carmacks. It was originally the main settlement in this area, and it remained the more important of the two settlements until construction of the Klondike Highway in the 1950s. The history of Carmacks therefore involves the history of Little Salmon.

In 1895, George Carmack build a trading post where Carmacks now stands. (In 1896, he was one of the discoverers of gold on Klondike River, a discovery that precipitated the gold rush.) After the discovery of coal and the establishment of a coal mine, Carmacks grew at the expense of Little Salmon.

During the gold rush, Carmacks became a service centre for travellers and prospectors going to the Klondike area. Its population increased, a roadhouse served weary travellers, and the town generally prospered. After the gold rush, the population dropped, but the trading post continued. Two small gold mines opened near Carmacks gave only temporary prosperity to the community before they closed. Around 1938, the caribou ceased to migrate past the settlement, and its population declined further and, by comparison, Little Salmon once again flourished.

In 1951, the completion of the Klondike Highway had a significant impact on Carmacks. River traffic largely ceased, in preference to the overland all-season route, and the population of Little Salmon, which was located on the river route, accordingly dwindled, and its people moved to Carmacks.

During 1958-59, the Department of Indian Affairs and Northern Development built the present-day Indian village on the north bank of the Yukon River, opposite the main settlement. Carmacks is at the intersection of roads that lead to Mayo, Dawson, Faro, and Whitehorse.

Current Population

The current population of Carmacks is about 400 people, of which roughly 75 per cent are Indians. The

town has become a service and communications centre for the surrounding mining areas. Although there is a separate Indian village across the river, many Indian families also live in town. The commercial district is a long narrow band close to the highway on the south side of the river. The main industries in Carmacks are the coal mine, which employs about 15 people, and the government services, such as the Highways Maintenance Service and the Yukon Lands and Forests Service (headquarters for the area). There are also hotels and bars. Many residents of Carmacks still supplement their diet to some extent from the bush and by fishing. Carmacks had the status of local improvement district, but, after the resignation of its executive, it reverted to the status of an unorganized community. The Indian village on the north bank was not part of the local improvement district.

Services and Facilities

Carmacks has a public school for grades one to nine; high school students go to Whitehorse. There is a nursing station, staffed by a full-time public health nurse; a medical doctor comes to Carmacks once a month, a dentist two or three times a year, and an optometrist perhaps once a year. So far as recreational facilities are concerned, there are two community halls, one in the residential district on the south bank and a new one in the Indian village, a small school gymnasium, a curling rink, two small outdoor skating rinks, one at the school and one in the village, an indoor heated swimming pool for summer use, a camp ground, a baseball diamond, and a small library.

Two RCMP constables live in Carmacks the year round. Bus service is available both north and south on the Klondike Highway and east along the Robert Campbell Highway. There is a gravel airstrip near Carmacks, but there are no scheduled flights. There is a post office, and mail is trucked into Carmacks three times a week. Both CBC radio and CBC-TV are provided, the latter at a cost of \$1,000 per year to the community. There are approximately 55 telephones in town.

Clinton Creek

The town of Clinton Creek, named for the stream near which it is located, exists because of an important asbestos deposit and mining activity related to it. The deposit was discovered in 1957 by Arthur Anderson, an Indian trapper. Cassiar Asbestos Corporation Ltd. built the entire town of Clinton Creek in 1967, about 25 miles north of the Top of the World Highway, close to

Fortymile River and the Alaska-Yukon border. The mine is about six miles north of the town itself, and the mill and administration offices are about two miles beyond that.

Current Population

The mine at Clinton Creek employs about 240 miners and 80 clerical staff. Turnover at this mine is a little lower than at similar mining towns in which the residential area is closer to the actual mining operations site. Other employees in the community include about six persons working for Alou Bus Lines, the company that provides transportation to the mill, mine, office, and town site, and the staff of the school, bank, road maintenance crew, and medical service. The total population of Clinton Creek is approximately 500.

Cassiar Asbestos has decided to terminate its operations at Clinton Creek in mid-1978 owing to depletion of its ore reserves. Many of the employees, pieces of equipment, and buildings will be moved to the company's mine at Cassiar, British Columbia, and as much of the rest of the town as can be economically dismantled will also be removed from Clinton Creek for use elsewhere.

Services and Facilities

Because Cassiar Asbestos established and built the town, it is almost completely owned by the company. No public accommodation, meals, or ground transportation are available.

The Yukon government runs the schools in which grades one to nine are taught. Although there is no public library, a book deposit station is available. Health care is provided by a public health nurse, who visits regularly from Dawson, and four resident nurses and a doctor at the company's medical clinic. A dentist visits the community three or four times a year. RCMP officers are sent there when necessary from Dawson, which is about 70 miles to the east.

Retail facilities are minimal. The company runs a general store and a cleaning-and-laundry service. The Canadian Imperial Bank of Commerce and a Pentecostal church also serve the town. Recreational facilities provided by the company include a curling rink, skating arena, and outdoor swimming pool. The community association has built a recreation centre, where table tennis, pool tables, and films offer indoor entertainment.

There is no public bus service to Clinton Creek, but two flights weekly to Whitehorse offer an alternative to driving west about 30 miles to the Alaska border or

east 70 miles to Dawson, where there is access to southern Yukon on the Klondike Highway. The latter route is used by the company trucks, which have been carrying about 106,000 tons per year of asbestos fibre to the railhead at Whitehorse.

Communications are similar to those in other central Yukon settlements. Telephones and mobile radio-phones are available. A company truck carries mail to the town five days a week and CBC radio and CBC-TV are available.

Dawson

The city of Dawson is located at Mile 334 on the Klondike Highway, about 340 miles northwest of Whitehorse, and at the junction of the Yukon and Klondike rivers. The town took its name from George M. Dawson, later the director of the Geological Survey of Canada, who had explored the region in 1887.

Before the gold rush, the Klondike River was noted for its excellent fishing, and small groups of Indians gathered at the mouth of the river, at the present site of Dawson, to fish for salmon. During the gold rush, an Indian village sprang up at Moosehide, two miles downstream.

In 1896 George Carmack and others discovered gold in a nearby creek, and thereby dramatically changed the character of Dawson. For the next year or so, news of the discovery of gold was confined largely to the Yukon, but by 1898, word had spread. Prospectors swarmed by the tens of thousands towards Dawson, and almost overnight the little settlement became the largest Canadian city west of Winnipeg, numbering about 40,000 people. The "Paris of the North" had running water, telephone service, steam heat, theatres, and hotels – all this just before the turn of the century.

By the summer of 1899, the Klondike gold rush had subsided, and the prospectors were going elsewhere. Over the next 20 years, as gold became more inaccessible, and as the individual miner was replaced by mining companies, the population dwindled along with the supply of gold. By 1921, the population had stabilized at less than 1,000.

The construction of the Alaska Highway in 1942 had a profound effect on Dawson, although the settlement was a considerable distance from it. With the highway, Whitehorse had become more accessible than Dawson and, as more and more services and businesses were centred there, the capital of the Yukon was moved from Dawson to Whitehorse in 1953.

Shortly after World War II, the Indians in Moosehide began to move to Dawson, encouraged in part by government housing provided there. The last inhabitants of Moosehide left in 1971.

Today the major industry in Dawson is tourism. The home of the author, Jack London, whose best known book is, no doubt, *The Call of the Wild*, and of the poet, Robert Service, are still standing and have been carefully preserved. Dawson boasts the only legalized gambling casino in Canada, Diamond Tooth Gertie's. For many years, Dawson has been carrying forward an elaborate restoration program, and recently the federal government announced that it will assist in a large-scale restoration program.

Current Population

Today Dawson numbers about 820 people, of whom about 70 per cent are White. There is a separate Indian village within Dawson's boundaries, but Indians live throughout the town as well. The Indians and some White residents of Dawson still supplement their diet to some extent with country food.

Services and Facilities

Dawson has a five-bed hospital, but could accommodate ten persons. It is staffed by one doctor and three nurses. A dentist visits Dawson four times a year, and an optometrist comes twice a year. There is a home for the elderly. Elementary and secondary schools cover grades one to twelve. So far as recreational activities are concerned, there are library facilities, several community halls, a cinema, school gymnasium, curling rink, skating rink, outdoor swimming pool, three camp grounds, three museums, one baseball diamond, and a soccer field. The George Black ferry runs between Dawson and the west bank of the Yukon River.

A four-man RCMP detachment is based in Dawson. Bus service along the highway comes to Dawson three times a week, and the nearby airstrip has regularly scheduled flights. There is a post office to which mail is trucked twice a week and flown in five times a week. CBC radio programs and CBC-TV are both available. There are approximately 275 telephones in town.

Destruction Bay

Destruction Bay, at Mile 1083 on the Alaska Highway, is situated on the shore of Kluane Lake, and the St. Elias Mountains rise magnificently behind it. The community was built in 1942 by the United States

Army, during construction of the Alaska Highway. The community has always been dependent on the highway. Some say the name came from the fact that many boats were wrecked and lives were lost at this location during the gold rush, but others claim the name was given by a road-construction crew, who called it Destruction Camp because their facilities blew down during a storm.

Current Population

The population of Destruction Bay grew from 13 in 1951 to 104 in 1961. It now stands at about 80, most of whom are White. It is an unorganized community, and is largely composed of young families employed by the service departments of the federal and Yukon governments, including Canadian National Telecommunications, Department of Transport, and government personnel, such as teachers, parks personnel, highway maintenance workers, and a nurse. There are about 25 houses in the community.

Services and Facilities

There is an elementary school, with two full-time and two part-time teachers; high school students go to Whitehorse. There is a trailer used as a health centre, and a public health nurse in full-time residence. A medical doctor visits once a month from Whitehorse, on his circuit of Beaver Creek, Burwash Landing, and Destruction Bay. The dentist visits twice a year, and the optometrist visits occasionally. There is a library, government hall, curling rink, outdoor skating rink, and, of course, Kluane Lake itself. The RCMP detachment at Haines Junction also serves Destruction Bay.

Bus service is available from Destruction Bay to Whitehorse and Fairbanks. The nearest air strip is at Burwash Landing, twelve miles north, but it has no scheduled flights. The post office is in Destruction Bay Lodge, and mail is delivered twice weekly. CBC-TV is available at a cost of \$1,000 to the community; CBC radio is free. There are approximately 32 telephones in town.

Faro

Faro is about 30 miles west of Ross River off the Robert Campbell Highway. In 1962, the rich lead-zinc deposits near Rose Creek were staked and, in 1968, Cyprus Anvil Mining Corporation began construction of a mine and ore-crushing plant at Faro. The name comes from a gambling game popular during the gold

rush. The new community was established for the mine employees in 1970.

Current Population

The current population of Faro is about 1,500, of whom 600 are children, some 561 people are employed by the mining company; about 25 per cent of the population is single. There are a few Indian families in the town, but most of them live in the bush or in the Indian community of Ross River. The houses in Faro are modern and have electricity, plumbing, and sewage. The streets are paved.

Services and Facilities

Faro is about four hours by road from Whitehorse, and there is bus service to Whitehorse three times weekly. Daily air service also links the town to Whitehorse. Full telephone and postal services are provided.

The school run by the Government of Yukon teaches grades one to twelve. Only one student comes from outside Faro, and the majority of the pupils are in the primary grades. The government owns several homes in the community in which the teachers live.

The cottage hospital in Faro is staffed by one doctor and six nurses, including a public health nurse. The union at the mine has hired a dentist and a dental hygienist. An optometrist stops at Faro on an annual tour through the Yukon. The Cyprus Anvil Mining Corporation has built recreation facilities, which include a recreation centre, curling rink, and baseball diamond, and they are available to Faro residents. The skating arena was a joint mine-city council project, and volunteers have built some tennis courts. An alpine ski centre is open when conditions are suitable during the winter, and cross-country skiing is a popular winter sport, as are fishing, hiking, and hunting during warmer weather. One cinema and a library offer indoor entertainment.

Three RCMP officers are based in Faro; one Government of Yukon social worker handles family and other social problems, and Ala Teen and Alcoholics Anonymous have regular meetings. A day-care centre looks after 15 to 20 children five days a week from September to the end of June. There are full postal and telephone services, and both CBC radio and CBC-TV are available.

Shopping is concentrated in a small business centre, where there is a department store, liquor, jewelry, and other stores. Two dress shops and a florist are situated in homes. Faro has a travel agent and two gas stations.

Haines Junction

Haines Junction, at Mile 1016 on the Alaska Highway, is at the junction of the highway with Haines Road, about 100 miles west of Whitehorse. Haines Road connects the ocean port of Haines, Alaska, to the Alaska Highway. There was no permanent settlement in this area before construction of the Alaska Highway, although various Indian groups, who were based at nearby locations, such as Champagne and Aishihik, often passed through the area.

In the past, two pipelines have been built through Haines Junction. The Canol Oil Pipeline, built between 1942 and 1944, connected Norman Wells, NWT, with Fairbanks, Alaska, passing by or through Ross River, Whitehorse, Haines Junction, Burwash Landing, and Beaver Creek. The Whitehorse to Fairbanks section, which passed through Haines Junction, was reactivated between 1948 and 1954, but it was removed in the early 1960s. The second line was the Fairbanks Products Pipeline, which ran from Haines, Alaska, to Fairbanks; it was built in 1954-55 and closed in 1971. It carried jet fuel, aviation gas, motor fuel, and diesel fuel. This line has not yet been removed.

Current Population

The population of Haines Junction numbers about 500, a considerable increase over the population in 1971 of 179. The increase followed the opening of Kluane National Park. About 25 per cent of this population is of Indian origin. The community came into existence because of the Alaska Highway; later construction of housing for Indians by the federal government has created distinct areas within the town. The commercial section is closely aligned to the highway, and there is a separate section of the town that holds government offices and other public buildings, such as the school, post office, and highway maintenance camp. The White and Indian residential districts are geographically separated and they differ in the type of housing. The Indian village is about 100 yards down a side road, and it consists largely of simple wooden buildings that have neither sewage nor plumbing. The White residential section, on the other hand, consists mainly of modern houses, with plumbing and sewage.

In 1968, Haines Junction was made a local improvement district. The Indian village does not fall within its boundaries. Country food supplements the diet of the community, especially the diet of the Indians.

Services and Facilities

As with certain other communities, Haines Junction can be divided into three categories: government, private business or industry, and activities related to the Indian Band. So far as government concerns are involved, there is a Yukon Game Branch office, liquor store, school, vehicle weigh station, RCMP station, and numerous other offices. So far as private industry is concerned, there are several gas stations and restaurants, a store, several motels, a craft shop, and other small businesses, all of them fronting on the Alaska Highway. The activities related to the Indian Band are those generally associated with other communities that have an Indian population.

The public school offers grades one to ten. For grades eleven and twelve, students must go to Whitehorse. There is a public health nurse, but there are no beds for overnight accommodation in the nursing station. A medical doctor comes once a month and a dentist visits once or twice a year.

There are two community halls one of these and the Indian Band hall, is situated in the Indian village. Since the advent of CBC-TV in 1976, a service that costs the community \$1,000 a year, the cinema has stopped showing films. CBC radio programs are received, and there is a branch library, which exchanges books with Whitehorse. Sporting activities include a gymnasium in the school, a covered skating rink used at times for curling, baseball diamonds, and a soccer field. The two-man RCMP detachment is increased to three men during summer.

The Alaska Highway and Haines Road provide easy access to other settlements, and a great deal of the town's economy is based on road traffic; a garage offers car and truck repairs. The bus service between Whitehorse and Fairbanks passes through Haines Junction. There is no water transportation to the town. There is an airstrip, although no scheduled flights stop at it. There are about 110 telephones in town, and mail is trucked to the local post office three times a week.

Mayo

Mayo is located on the flood plain at the junction of the Stewart and Mayo rivers, about 200 miles northwest of Whitehorse, and it is connected to Stewart Crossing and the Klondike Highway by a 35-mile stretch of road. Because the town is susceptible to floods, it is protected by a system of dykes along the river banks.

Mayo was originally called Mayo Landing; the name comes from Al Mayo, a prospector in the Yukon before the gold rush who later turned to trading. He and his partners Jack McQuesten and Arthur Harper were some of the first prospectors in the region. One of the first Yukon rivers to attract gold miners was the Stewart River, and in 1886 gold was found on one of its tributaries. Mayo Landing and Gordon Landing grew up to serve this mining area, but Gordon Landing soon declined to the advantage of Mayo Landing.

In 1919, silver was discovered at Keno Hill. Elsa and Keno are two mining communities about 30 miles north of Mayo and closely linked to it. With the silver discovery, Mayo grew from a trading post to become a river landing exporting ore and importing goods to distribute for mining operations in the area. The Klondike Highway, connecting Whitehorse, Mayo, and Dawson was finished in 1951, ending Mayo's function as a primary staging point and landing. The sternwheelers that plied the Yukon River were discontinued after the road was built. Mayo is still a distribution centre for the mining industry, and its fortunes are closely tied to the varying output of the mines at Elsa and Keno.

Current Population

Of the 500 or so inhabitants of Mayo, about 75 per cent are of Indian ancestry. The Indians originally lived in nearby camps and other communities along the river, such as Fort Selkirk. Some came from as far away as Fort Norman and even Fort McPherson. Although there is a separate Indian village, many Indians live throughout the town. The commercial district faces the river. Mayo is a local improvement district. Although the salmon fishing has been less productive in recent years, the residents of the town still take a significant proportion of their food from the bush and river.

Services and Facilities

Elementary and secondary schools in Mayo offer grades one to twelve. There is a 16-bed hospital, which can accommodate 30 patients, one full-time medical doctor stationed in Mayo, and another who travels to Elsa periodically during the week. There are generally five nurses working at or out of the Mayo hospital. A dentist visits twice a year and an optometrist once a year.

For recreation, there is a branch library, a community hall, a revival hall, and films are shown twice weekly in Elsa. There is also a school gymnasium, curling rink, outdoor swimming pool, camp ground, and two baseball diamonds. Mayo is building a skating rink.

A three-man RCMP detachment is based in Mayo. There is regular bus service along the Klondike Highway and scheduled flights to the airstrip just outside town. Mail is delivered to the post office four times a week. CBC radio and CBC-TV are both available at no charge. There are about 165 telephones in Mayo.

Old Crow

Old Crow is an Indian village on the Porcupine River, just west of its junction with Old Crow River, almost on the 68th parallel in northern Yukon. Archaeological evidence suggests that people have been living in this area for 30,000 years, making it one of the oldest sites of human habitation in North America. The name is an adaptation in English of Te-Trhem-Seirk or Raven-May-I-Walk, the name of a respected chief about the end of the 19th century. The history of Old Crow is linked with the fur trade. The Vunta (Crow River) Kutchin had traded either at Fort Yukon, a Hudson's Bay Company post established in Russian America in 1847, or at Fort McPherson on Peel River, NWT. After the United States purchased Alaska in 1867, the Hudson Bay Company moved its post up river to bring it within the Canadian border. By mistake this new post was also situated in Alaska, so another post was built at Rampart House, below present-day Old Crow. After the Hudson's Bay Company ceased trading in the Yukon, the associations of Vunta Kutchin with Fort McPherson, which had always been close, grew stronger.

The site of the village has long been known as a good fishing location, and it is near major crossing places of the Porcupine caribou herd during both its autumn and spring migrations. The first permanent building is said to have been built about 1900. In 1911 a smallpox epidemic at Rampart House spread up Porcupine River, seriously reducing the population of both the Old Crow River people and their neighbours on the upper Porcupine River. The survivors moved to Old Crow's village and made it their centre. Buildings at Rampart House were burned to prevent further spread of the epidemic. Two independent traders built posts at the village in 1912, and the settlement has continued in existence ever since.

Until the 1950s, the people wintered in small camps of a few families each along the river. After a federal day school was built in the village, most of the winter trapping camps were abandoned. (Before the school was built, the children went to residential schools in Whitehorse and Carcross.) Even today the people of

Old Crow still depend in large part on the land, especially the Porcupine caribou herd. The "ratting" season, in late spring and early summer, is also important to them. The great majority of the people leave the village to camp in the Crow Flats nearby, to trap and hunt muskrat.

Current Population

Old Crow numbers over 200 people, of which about 90 per cent are of Indian ancestry. They fish, hunt, trap, or work for government institutions or departments. Physically, the Old Crow settlement lies on a river bank that is gradually but persistently being eroded, with the airstrip at its back. There are about 30 wooden buildings in the settlement. The houses have neither plumbing nor sewage. Old Crow is an unorganized community, and many of its affairs are managed by the Department of Indian Affairs and Northern Development.

Services and Facilities

The school in Old Crow offers grades one to nine, and can accommodate about 80 students. There is a nursing station with one full-time nurse in residence, and a medical doctor visits several times a year. The nearest hospital is in Inuvik. A dentist comes from Whitehorse about once a year. For recreation, there is a community hall and a small library.

A two-man detachment of the RCMP, one corporal and one special constable, is located in Old Crow. The only access to the village is by air; there are scheduled flights twice a week during summer and once a week in winter.

There is no regular CBC radio or TV reception, but taped TV programs are shown twice a week. The village will probably be able to receive CBC-TV by satellite before the end of 1977. There are about twelve telephones in the settlement. Mail is delivered by air twice weekly.

Pelly Crossing

Pelly Crossing is on the Klondike Highway, where it crosses Pelly River, about 175 miles north of Whitehorse, roughly midway between Whitehorse and Dawson. The area was originally dominated by Fort Selkirk, a fur trading post established by Robert Campbell in 1848, which was located about 30 miles west of present-day Pelly Crossing, at the junction of the Pelly and Yukon rivers. With the gold rush and the influx of settlers and prospectors, Fort Selkirk

increased in size. The Northwest Mounted Police at Fort Selkirk checked prospectors on their way to the gold fields to ensure that they had enough provisions and were adequately prepared for the journey.

In 1952, the Klondike Highway linked Dawson to Whitehorse and to Mayo, and a new community, Pelly Crossing, was created. The government desired to centralize services for the inhabitants of that area, and because Fort Selkirk was on the river, off the highway, it was soon abandoned. In 1956, a hotel, store, and gas station were opened at Pelly Crossing, and this complex attracted many Indian families from the declining settlements in the surrounding area.

Current Population

The current population is about 180, most of whom are Indians. Many of them work on part-time or seasonal jobs and supplement their income and diet by trapping, hunting, and fishing. Most of the dwellings are small log houses. Some modern houses have been built, most of them for the White population. Pelly Crossing is an unorganized community.

Services and Facilities

There is a store and post office run by the Selkirk Band Council and a health station with a full-time nurse. A medical doctor visits once a month. There is a two-room elementary school that offers grades one to seven, an outdoor skating rink, two churches, a gas station, and a community hall. There is no plumbing or sewage in most of the houses, and water must be hauled from the river. Recently, a few low-income housing units have been built with running water from wells.

The settlement does not receive CBC radio but CBC-TV can be received with an aerial. There is bus service to Dawson and Whitehorse; there is a short airstrip nearby, but no scheduled flights stop at Pelly Crossing. The detachment of the RCMP at Carmacks serves this area. Mail is delivered twice a week. Most of the local employment and other activities are run from the office of the Band Council.

Ross River

Ross River is situated at the confluence of the Ross and Pelly Rivers, about 225 miles by road northeast of Whitehorse, near the junction of the Canol Road and the Robert Campbell Highway. The settlement takes its name from the river named by Robert Campbell in 1834 for his friend, Chief Factor Ross.

The Hudson's Bay Company established trading posts in the southern Yukon in the 1840s, which brought the Indians of the region into a closer relation of the fur trade of the Mackenzie Valley. The seasonal cycle based on the fur trade continued until 1942, when the Canol Road and Canol Pipeline passed through the region. The Canol Pipeline linked Norman Wells, NWT, with Johnsons Crossing on the Alaska Highway, a small community about 50 miles east of Whitehorse. The Canol Road was built to provide access to and service for the pipeline, and this road gave Ross River its first overland communication with other communities.

This access to the outside world and the influx of large numbers of American soldiers for construction purposes greatly altered the character of Ross River. Many Indians left the bush to work on the pipeline and stayed permanently in the settlement. With the closing of the other two trading posts nearby, more Indians settled in Ross River.

In the 1960s, the Anvil mine was developed in the area, and it brought further changes to Ross River. The Cyprus Anvil Mining Corporation built the new town of Faro, about 45 miles west of Ross River, just off the Robert Campbell Highway, to service the mine. The anticipated migration of the residents of Ross River to Faro did not happen. On the contrary, a significant number of Whites moved to Ross River. The Robert Campbell Highway was completed in 1968, when the Anvil mine was brought into production.

Current Population

The current population is about 350, a slight majority of whom are of Indian origin. There is a distinct Indian village in Ross River, and most of the Indian population lives in this area. Most of the houses in the Indian village are small wooden buildings. The mainly White population of Ross River lives in more modern and substantial buildings. In Ross River, as with other small towns in the Yukon, both Whites and Indians derive significant portions of their diet from the bush and the rivers and lakes.

Ross River is an unorganized community. In the summer, it is the communications and supply centre for the mining exploration and geological camps along the Canol Road. Many people living there are also employed in government services, such as the Yukon government's highway maintenance garage and the federal forestry service.

Services and Facilities

The new school in Ross River offers grades one to ten; for grades eleven and twelve, students must go to

Whitehorse. There is a residence that can accommodate eight out-of-town students.

The nursing station has a full-time public health nurse, and a medical doctor visits Ross River twice a month from Faro. The dentist comes once a year, and there is a dental program for school children sponsored by the Cyprus Anvil mine. The optometrist visits Ross River once a year.

There are two community halls in town, one in the residential district near the school, and one in the Indian village. There is a school gymnasium, curling rink, outdoor skating rink, camp ground, baseball diamond, and school library. A detachment of two regular RCMP officers and one special constable is stationed at Ross River.

There is bus service to Ross River and a gravel airstrip with scheduled flights twice weekly. Both CBC radio and CBC-TV are provided, but TV viewers are asked for a voluntary contribution of \$25 per year. There is a post office in the Ross River store to which mail is delivered by truck three times a week. There are approximately 70 telephones in Ross River.

The three categories of employers – government, private business, and the Band Council – and each employs about the same number of workers.

Teslin

Teslin is located at Mile 804 on the Alaska Highway, where it is nestled into the narrows between Teslin Lake and Nisutlin Bay, an extension of the lake. Teslin means long narrow water, an Indian word that aptly describes the 86-mile-long lake. Tlingit Indians from the North Pacific coast were the original settlers in the Teslin area. They lived mainly by trapping and hunting, and, because of the demand for furs by Russian and European fur traders, the Tlingits had gradually worked their way inland and had located around the southern part of Teslin Lake, in northern British Columbia. During the winter, they trapped and hunted, then they moved to the north end of Lake Teslin in the summer. Around 1900, there was a Hudson's Bay Company post and a sawmill near the southern part of the lake. Soon after this post closed, another post was opened in 1903 on the present site of Teslin.

The gold rush did not greatly affect Teslin, although the number of people who travelled to the area increased. Teslin became a permanent settlement almost overnight with the construction in 1942 of the Alaska Highway and the Nisutlin bridge. Until that time, people

had come to Teslin only to trade, spending the rest of the year fishing and hunting in the bush. The highway construction involved a large influx of people: roughly 10,000 military personnel passed through the area. In 1942, also, the United States Air Force built an airstrip at Teslin as part of the North West Staging Route from the United States to Alaska. In 1945, the first school was built in the Teslin area, the result of cooperation between United States Army personnel and the local residents. In 1965, the government built a new school on Indian land.

The present mainstay of the Teslin economy is hunting, fishing, trapping, and tourism. The Teslin businesses, such as service stations and motels, have grown up along the highway, and the residential areas are well back from it. For this reason, a visitor enraptured by the beautiful scenery of the region could easily drive through Teslin without realizing it.

Current Population

The current population numbers approximately 350 persons, of whom about 50 per cent are of Indian ancestry. Teslin is a local improvement district, and there are four distinct parts to the community: a main commercial area along the highway, an Indian village, a government settlement of about 17 houses, and a lodge, and a few houses near the Nisutlin bridge. A significant proportion of the food eaten by the Teslin residents comes from the bush. Although there is a distinct Indian village, some Indian families live in other parts of the town. The only canoe factory in the Yukon is at Teslin, and it is owned and operated by the Indian Band.

Services and Facilities

Teslin has a public school that offers grades one to ten; high school students go to Whitehorse. There is a health centre, staffed by a public health nurse who also serves Swift River and Carcross. A medical doctor visits Teslin once a month, and a dentist and an optometrist usually come once a year.

Teslin has two community halls, one in the Indian village and one in town. There is an indoor swimming pool, indoor skating rink, curling rink, and a school gymnasium for recreational purposes. Teslin has a small museum, soccer field, and two baseball diamonds. Library books are exchanged periodically with Whitehorse.

There is post office, with mail delivery trucked in three times a week. There are roughly 70 telephones in Teslin. Both CBC radio and CBC-TV are available. Since the advent of the CBC-TV, the community hall

has stopped showing films. The RCMP has a three-man detachment in this community: two regular officers and one special constable. Teslin is located directly on the Alaska Highway and it has regular bus service. Although Teslin has a gravel airstrip, there are no scheduled flights to it.

Upper Liard

Upper Liard is located on Liard River, at Mile 643 of the Alaska Highway, about eight miles west of Watson Lake. The Kaska Indian Band centres on Upper Liard. In the mid-19th century, there was a trading post near the location of the present community at the juncture of Smith and Liard rivers. After World War II, the federal government built an Indian village at Upper Liard and centralized there all government services for the region. Many Indian families moved from surrounding areas to the village, which is, at present, the main settlement of the Liard River Band. This band now numbers about 600, and it is spread over seven reserves.

Current Population

About 250 persons live in the village of Upper Liard, almost all of whom are Indians. The settlement consists of about 40 wooden houses in various states of repair. There is a lodge, a church, and a nursing station in the settlement, which has the status of an unorganized community. The Band Council of this community is located in Watson Lake.

Services and Facilities

All children attending school are bussed to Watson Lake; there is a group home for 16 students at Upper Liard. There is a small health unit visited by a nurse once a week; otherwise residents use medical facilities at Watson Lake. Upper Liard has an Indian Band hall, but all other recreational activities are in Watson Lake. The RCMP detachment at Watson Lake also serves the Upper Liard area.

The community receives CBC radio and CBC-TV, and there are six telephones there. Mail delivery is to Watson Lake.

Watson Lake

Located at Mile 635 on the Alaska Highway, at the junction of the Alaska and Robert Campbell highways, Watson Lake is a relatively new community, which

owes its continued existence to the building of an airstrip there in 1939. Geographically, Watson Lake is closely associated with two small communities on either side of it; one Upper Liard, is just within the Yukon, and the other, Lower Post, is just south of the British Columbia border, approximately 14 miles east of Watson Lake.

The Kaska Indians who lived and hunted in the Upper Liard – Lower Post area came to fish in Watson Lake during the winter. In the mid-1800s, fur trade posts were built in the nearby areas of Fort Halkett, Dease Lake, and Fort Frances, but none of them lasted any great length of time. When, in 1870, gold was discovered in the Cassiar region of northern British Columbia, not far from Watson Lake, there was a minor gold rush to the area. The influx of Whites caused certain problems, and epidemics seriously reduced the Kaska population. The Klondike gold rush of 1898 brought far more Whites to the Yukon. One of them, Frank Watson, from Yorkshire, England, married a Kaska Indian woman and settled there.

In 1939, an airport was built near Watson Lake, and a permanent White settlement was established there. In 1942, the Alaska Highway was built. At the same time, the federal government decided to centralize its Indian services for the area at Upper Liard village. These two factors caused a general movement of Indians from the surrounding areas to Upper Liard.

Watson Lake today depends on the Alaska Highway, and the Robert Campbell Highway, which was built in 1968 to link Watson Lake with Faro, Ross River, and Carmacks. The new road increased the flow of tourists through Watson Lake. The settlement is the lumber capital of the Yukon. A large portion of the world's jade is found in the Cassiar region of northern British Columbia and passes through the Watson Lake area. Much of it is shipped to the Orient to be carved by artists there, then returned to Canada for sale.

Current Population

The population of the local improvement district of Watson Lake is just over 805, but including the people who live at the airport and near the district, the population numbers about 1,100. Virtually all of the residents in town are White, and most of them live in modern suburban homes.

The Liard Band office, which serves seven reserves, including Upper Liard, Lower Post, Two-and-a-Half Mile, and Watson Lake, is located in Watson Lake itself, and Band activities are managed from it.

Services and Facilities

The schools at Watson Lake offer grades one to twelve, and residential facilities are provided for up to twelve out-of-town students. A ten-bed hospital is staffed by two medical doctors and seven nurses. A public health nurse based at this hospital visits Upper Liard and Lower Post once a week. A dentist and an optometrist visit several times a year, and people from Upper Liard and Lower Post go to Watson Lake for dental and optical attention.

Watson Lake has a large recreation complex, consisting of a community hall, curling rink, and a new indoor skating rink. There is a library, high school gymnasium, indoor swimming pool used in summer, baseball diamond, two camp grounds, and a ski slope. The ski club is very active.

The RCMP have a seven-man detachment based at Watson Lake. The town has regular bus service, a rent-a-car agency, and taxi service. There is a modern paved airport, which has two scheduled flights a day, one to Whitehorse and one to Edmonton, and there are three air charter firms. The post office provides daily mail service. Both CBC radio and CBC-TV are received, and there are about 440 phones in Watson Lake.

Whitehorse

Whitehorse, the capital of the Yukon, is located at Mile 918 of the Alaska Highway on the banks of Yukon River. The main downtown area is nestled between an escarpment and the river itself. The Indians who hunted and trapped in this area before the gold rush made their headquarters at Lake Lebarge or Lower Takhini River, so there was no settlement in Whitehorse before that time. In 1897, a wooden tramway system was built around Miles Canyon and the treacherous White Horse Rapids. A small settlement grew up near the tramway's northern terminus, where travellers rested after completing the portage. The settlement was at that time situated on the east bank, and it was called White Horse after the rapids.

Because of the great influx of prospectors and others, the White Pass & Yukon Railway was built from Skagway, Alaska, to Whitehorse between 1898 and 1900. The railway's terminus was on the west side of Yukon River, opposite the older settlement, which was soon abandoned in favour of the new site. For its first few months of existence, the new town near the railhead was called Closeleigh, after the Close brothers of London, England, who were stockholders in the

railway. However, the town's name soon reverted to Whitehorse, which quickly became the transportation centre for all traffic into and out of the gold fields. The railway's success led to the decline of small settlements on the river and lakes south of Whitehorse, such as Tagish, Canyon City, and Carcross.

Around 1900, there was some movement of Indians into the area to seek wage employment. The first Whitehorse Indian village was established on the east river bank in 1907. The end of the Klondike gold rush led to a steep decline in the population of Whitehorse, and, for several years, copper mining sustained the town, but around 1920 this activity also became unprofitable. Between the gold rush and the construction of the Alaska Highway in 1942, there was a period of little economic activity in the Whitehorse area and, indeed, in other parts of the Yukon.

The building of the Alaska Highway through Whitehorse dramatically altered the city. The population jumped from 754 in 1941 to about 40,000 in 1943. The United States Army took control of Whitehorse, claiming that construction of the highway was a national emergency and that such action was necessary because of the fear that the Japanese would invade Alaska. Roughly 80 per cent of the construction undertaken in Whitehorse at that time was done by or for the United States Army.

Other events at approximately the same time also bolstered the population and economy of Whitehorse. The government built a modern airport, another step in the North West Staging Route, and the Canol Pipeline and Canol Road were both built between 1942 and 1944. Construction of the Canol Pipeline led to the building of an oil refinery in Whitehorse.

When the war ended, the American military personnel departed, leaving the Canadian authorities to maintain the highways, and the population once again shrank. In 1951, the government offices were moved from Dawson to Whitehorse, a move that increased the population of Whitehorse once again. In 1953, when Whitehorse became the capital of the Yukon, its population was only 2,500.

Since 1953, Whitehorse has gradually and steadily expanded, both in its size and its economic base, so that no one source of revenue is now solely responsible

for the city's prosperity. A variety of interests, such as mining, prospecting, transportation, government, and tourism are found there and, indeed, Whitehorse is the administrative, distributive, and tourist centre of the Yukon, as well as its largest city. The present population is about 13,000, out of a total Yukon population of 22,000, or just over 50 per cent of the total population.

Current Population

Whitehorse has a central commercial district, with many and widely varied stores and businesses. Radiating off this district are residential areas. A separate and distinct industrial area is on the north end of town, just beyond it is the Indian village. Several modern suburbs of Whitehorse are indistinguishable from the suburbs of any large modern city today. There are also new subdivisions, which have sprung up along several miles of the Alaska Highway in both directions.

Whitehorse is a city with a sophisticated municipal structure. The headquarters of the three main Indian organizations in the Yukon, the Council for Yukon Indians, the Yukon Native Brotherhood, and the Yukon Association of Non-Status Indians, are all based in Whitehorse. In summer, the influx of tourists and visitors swells the population of Whitehorse dramatically; an estimated 300,000 persons pass through the city during the course of the year, the great majority of them during the summer months.

Services and Facilities

The facilities and services available in Whitehorse are those found in any large modern city. There are medical clinics, a large modern hospital, numerous schools that serve both elementary and secondary school levels, and a vocational school. Many students from the smaller settlements in the Yukon go to Whitehorse for their higher grades and high school. Recreational facilities are many and varied, including numerous community halls, YWCA, libraries, arenas, curling rinks, and so forth. As one would expect of a tourist-based economy, the city has many hotels, motels, bars, and restaurants.

Whitehorse receives both CBC radio and CBC-TV, and it has a private radio station. Cable television is available in the Whitehorse area, and it offers those subscribers five different stations. There are three newspapers published in Whitehorse.

Appendix C

Participant Organizations – Formal Hearings

Participant	Counsel
Alaska Highway Pipeline Panel	Carson Templeton
Council for Yukon Indians	David Joe
Canadian Arctic Gas Pipeline Ltd.	Jack Marshall Ken Taves
Foothills Pipe Lines (Yukon) Ltd.	Reg Gibbs Alan Hollingworth Ralph Hudson
Government of Yukon	Sid Horton
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Yukon Association of Social Workers	Nancy MacPherson
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Commission Counsel	Stephen Goudge Ian Roland

Appendix D Acknowledgements

The Board wishes to express its appreciation to the many persons who contributed their knowledge, experience, and time to the work of this Inquiry.

In the introductory chapter of this report we noted the excellent cooperation received from all participants in meeting the heavy demands imposed by our schedule of hearings. We are much indebted to them, and to their counsel, for their readiness at all times to recognize and accommodate our needs and priorities.

We are grateful, too, for the cordiality with which we were received by the many Yukoners who came to our hearings and who assisted us in many other ways.

The Government of Yukon cooperated fully with the inquiry. The Commissioner, Dr. Arthur Pearson, his colleagues on the Executive Committee, and every member of the legislative assembly made submissions to us – some of them more than once. Mr. Al Wright, the Yukon's pipeline coordinator, and other officials in the Yukon government, provided invaluable assistance in facilitating our arrangements.

We wish to record our appreciation for the support received from the Minister of Indian Affairs and Northern Development, the Honourable Mr. Warren Allmand, for whom this report was prepared, from the Deputy Minister, Mr. Arthur Kroeger, and from their colleagues in the government and public service of Canada.

Finally, special mention must be made of the dedication shown by members of the Inquiry staff. Many of them rearranged their plans for the summer of 1977 at considerable personal inconvenience to work with us, and they worked very hard. We wish to thank them for that and for their willingness at all times to give precedence to the work of the Inquiry.

While we gratefully acknowledge the contribution made by staff members, the Board itself bears responsibility for the judgments expressed in this report.

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Report Design
Paul Rowan, Alphatext Ltd.

Index
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We wish to extend special thanks to

Donat Savoie and members of the Northern Social Research Division of the Department of Indian Affairs and Northern Development

Paddlewheel Research Institute

The maps in this report were prepared by

Everett Peterson, Western Ecological Services Ltd., Edmonton, Alberta.

Several published reports were used to provide information shown on some of the maps. These reference sources were:

Figure 4 – based on *Their Own Yukon*. Manuscript by Julie Cruikshank, 1975. Map Number 1.

Figure 7 – based on *Yukon Railway Study*. Prepared by Catalog Logistics Ltd., and Canadian Pacific Consulting Services Ltd., 1975. Page 29.

The Development of Power in the Yukon. Appendix 3, Environmental and Social Aspects. Sigma Resource Consultants Ltd., Canadian Resourcecon Ltd., Lee Doran and Associates Ltd., Glen Smith, Wildlife Consultant, 1975. Map 8-2.

Figure 8 – based on *The Development of Power in the Yukon*. Figure 10.1.

Seasonal Distribution, Population Status and Behaviour of the Porcupine Caribou Herd. Dennis C. Surrendi and Elmer A. DeBock, Canadian Wildlife Service, Mackenzie Valley Pipeline Investigations, 1976. Figure 54.

The photographs in this report were provided by the following organizations and individuals:

George Adamson, Whitehorse

Lorraine Allison, Lundbreck, Alberta

Alyeska Pipeline Service Company, Anchorage, Alaska

Department of Indian Affairs and Northern Development (Bill Braden, Whitehorse)

Nancy Cooper, Yellowknife

Foothills Pipe Lines (Yukon) Ltd.

Andrew Hume, Images North, Whitehorse

Public Archives of Canada, Ottawa

Sumire Sugamoto, Whitehorse

Wayne Towriss, Yukon Territorial Government, Whitehorse

Ray Unger, Whitehorse

White Pass and Yukon Route, Whitehorse

Whitehorse Star, Whitehorse

Yukon Archives, Whitehorse

Yukon Indian News, Whitehorse

